

# PRACTICE TEST

---

# 1

## Test Reminders

1. A #2 pencil is required.
2. Follow the time restrictions for each section.
3. You are allowed to write on the test.
4. Circle your answers to ensure accuracy when filling in the answer sheet, provided on page 317.
5. Calculate your estimated score by using the conversion chart on page 319.

# Reading Test

65 MINUTES, 52 QUESTIONS

**Directions:** Each passage or pair of passages below is followed by several questions. Read each passage or pair, and then choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

Turn to Section 1 of your answer sheet to answer the questions in this section.

1

**Questions 1-10 are based on the following passage.**

This passage is adapted from JB Page, "Shark Attacks." ©2007 by JB Page.

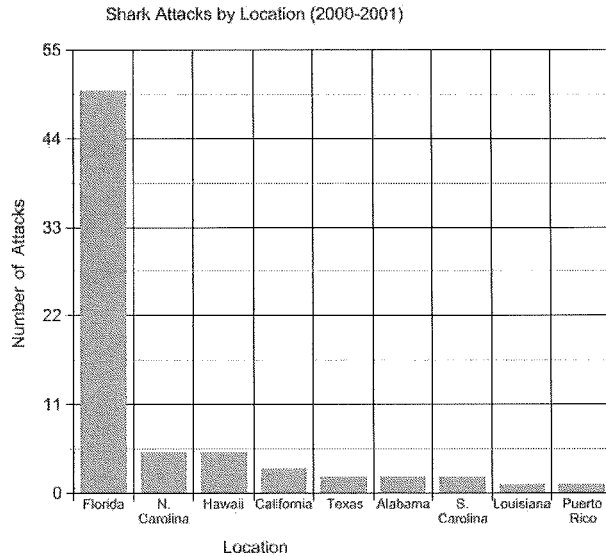
- Shark attacks have increased in recent years. But for all the terror they stir, the numbers remain minuscule. Worldwide, there were 79 unprovoked attacks last year, compared with 58 in 1999 and 54 the year before, and two-thirds were in U.S. waters. The higher numbers may reflect the higher number of people on U.S. beaches: more surfers, boogie-boarders and open-water swimmers—more people splashing around, hence more attacks.
- Volusia County, Florida, holds the state record for attacks because its long coastline and many beaches are increasingly populated with bathers commuting from the booming cities of central Florida.
- Humans are much more threatening to sharks, which tend to end up in soup or medicine. Fishing nets tangle and drown about 100 million sharks each year, but in California there is only one shark attack for every 1 million surfing days, according to the Surfrider Foundation. You are 30 times as likely to be killed by lightning. Poorly wired Christmas trees claim more victims than sharks, and dogs—man's best friends—bite exponentially more people than sharks do.
- But these are terrestrial and mundane risks. Sharks lurk in the vast, mysterious ocean, an element that still stirs mythic fear. Science is shedding light on why sharks behave the way they do: researchers are tracking sharks via satellites and coming closer to understanding why they attack humans. The three large sharks that account for most attacks on people—the great whites, the tigers, and the bull sharks—have been studied extensively. We now know that great white sharks keep their blood warmer than the surrounding water, that tiger sharks do not return to the site of an attack to prey again, and that bull sharks have the highest levels of testosterone measured in any creature, land or sea. Each has a different diet, a different behavior pattern, and a different mode of attack.

Sharks are one of nature's ultimate designs,

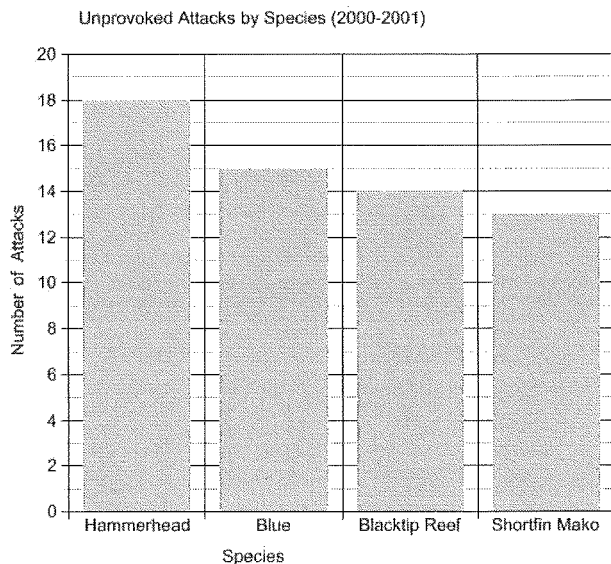
- tested over 400 million years—confident, sleek, and lethal. Studies show some sharks can measure changes in electric currents as tiny as five-billionths of a volt, and they use this ability to hunt for prey hidden under the sand and to navigate according to the earth's magnetic field. "They are like some high-tech AWACS thing, with all their sensors," says Sean Van Sommeran, executive director of the Pelagic Shark Research Foundation in Santa Cruz, California. When they do attack a human, the weight of evidence now suggests, they have mistaken a person for a seal or some other prey, and most often will expel human flesh after the first bite. The problem is, of course, that the one bite comes from jaws that are up to 3 feet across and that are lined with the equivalent of hundreds of sharpened knives.
- Great whites are the most lethal to humans. Since 1876 there have been 254 confirmed unprovoked attacks on humans by great whites, 67 of which were fatal, according to statistics compiled by the International Shark Attack File at the Florida Museum of Natural History. Over the same period, tiger sharks have attacked 83 times with 29 fatalities, and bull sharks have attacked 69 times with 17 fatalities. Great white attacks on humans generally involve just one bite. Researchers are not sure, but most think the shark's sensory organs quickly differentiate between humans and the blubbery seals it prefers, so it effectively bites and spits out humans.
- Scientists ultimately hope to de-mythologize sharks, to erase their images as rogue man-eaters like the great white shark that figures in *Jaws*, the Peter Benchley novel turned Steven Spielberg movie classic. Benchley, who says he is now "a full-time ocean conservationist," recently stated, "I couldn't write *Jaws* today." After 25 years of research, the demonization of sharks doesn't hold, he says. "It used to be believed that great white sharks did target humans; now we know that except in the rarest of instances, great white shark attacks are mistakes." Dr. Robert Lea, a marine biologist working for the state of California, goes further: "I used to call them shark attacks—now I call them incidents. It is not a case of sharks preying on humans. It is just humans sharing a spot in the ocean with sharks—at the wrong time."

CONTINUE

**Graph 1**



**Graph 2**



**1**

The passage most strongly suggests that

- A) bull sharks attack more people than any other species of sharks due to high testosterone.
- B) shark attacks on humans are common because the sharks are often provoked.
- C) sharks are not as dangerous to humans as people might think.
- D) the book *Jaws* is solely responsible for sharks' poor image.

**2**

Given the author's tone, the passage can best be described as

- A) a passionate plea to support a cause.
- B) a logical counter to a popular belief.
- C) a thoughtful reflection on a personal experience.
- D) a forceful argument on a controversial issue.

**3**

Which choice provides the best evidence for the answer to the previous question?

- A) Line 1 ("Shark attacks ... years")
- B) Lines 21-24 ("Poorly wired ... sharks do")
- C) Lines 26-27 ("Sharks ... fear")
- D) Lines 42-44 ("Sharks ... lethal")

**4**

As used in line 25, the word "mundane" most nearly means

- A) tedious.
- B) unconcerned.
- C) exotic.
- D) unsensational.

**5**

Based on the passage, which of the following best describes the relationship between humans and sharks?

- A) Humans rely on sharks for scientific analysis, while sharks see humans as prey.
- B) Humans are fascinated by sharks, but sharks generally ignore humans that do not resemble seals.
- C) Humans and sharks sometimes harm each other, but humans harm sharks in much greater numbers.
- D) Sharks are beginning to see humans as a viable source of food as the number of beachgoers increases each year.

6

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 16-20 (“Fishing nets ... Surf rider Foundation”)
- B) Lines 31-34 (“The three ... extensively”)
- C) Lines 56-59 (“The problem ... knives”)
- D) Lines 69-72 (“Researchers ... humans”)

7

Dr. Robert Lea prefers the term “incidents” rather than “shark attacks” (lines 87-88) because

- A) shark attacks on humans are not usually fatal.
- B) the term “incidents” is more accepted among scientists who study sharks.
- C) the term “shark attack” falsely implies that sharks deliberately attack humans.
- D) the term “shark attack” only applies when the attack involves more than one bite.

8

As used in line 75, the word “rogue” most nearly means

- A) rebellious.
- B) unfeeling.
- C) crooked.
- D) villainous.

9

Based on the information from the passage and from Graph 1, which of the following is the most reasonable inference?

- A) Shark attacks were rare near Louisiana and Puerto Rico because sharks avoided these areas.
- B) Florida had the most densely-populated beaches and, thus, the most shark attacks.
- C) North Carolina had more shark attacks because its coastline is longer than California’s.
- D) The same number of people lived near the coast in Texas and Alabama, so these states had the same number of shark attacks.

10

Based on the information from the passage and from Graph 2, which of the following is the most reasonable conclusion?

- A) At least seven different species of sharks have been known to attack humans.
- B) Hammerhead sharks are typically docile and safe to swim near.
- C) Blue sharks are less likely to attack humans than are shortfin mako sharks.
- D) Great white sharks have killed more humans than have all other shark species combined.

**Questions 11-21 are based on the following passages.**

Passage 1 is adapted from Daniel Imhoff, "Food Fight!" ©2013 by Daniel Imhoff. Passage 2 is adapted from Madeline Ostrander, "Can GMOs Help Feed a Hot and Hungry World?" ©2014 by Madeline Ostrander.

**Passage 1**

- A GMO, or genetically modified organism, is a plant or animal whose DNA has been altered through biotechnology. This is typically accomplished by transferring DNA from one species to another. Plant scientists argue that such genetic exchanges have been going on for thousands of years and are part and parcel of the natural process of evolution. Genetic engineering, they argue, simply mimics this natural process.
- The inter-species leaps accomplished inside biology laboratories, however, are completely artificial. They essentially fabricate partnerships not possible in traditional plant breeding. Other DNA transfers, such as the insertion of a fish gene into a tomato or human growth genes into pigs and fish, cannot be found in nature.
- Existing GMO crops haven't made foods tastier, healthier, or longer lasting. They haven't helped farmers deal with climate change or challenges like drought or heat tolerance. Instead, the technology has primarily been used to create a germplasm (living tissue that contains a plant's genetic information) and pesticide "package" that services a farmer from seed to harvest. For the corporations who sell GMO seeds, like Monsanto, Dow, and DuPont, profit is harvested all along the way.
- Farmers buy the patented seed from the biotech company. Farmers also buy the herbicide manufactured by the company to which the crop has been made resistant. According to the licensing agreement, the farmer is not allowed to save seed for next year's planting. This assures that the profit cycle begins all over again the following year. It also breaks an old tradition of seed saving and selection practiced by farmers since the dawn of agriculture. And for some crops, such as soybeans, it has become more and more difficult and expensive for farmers to find uncontaminated non-GMO seed.

**Passage 2**

- Eduardo Blumwald's genetically modified plants fill four modest greenhouses in a concrete lot behind Blumwald's laboratory at the University of California, Davis. The tiny seedlings (spiky grasses, alfalfa, and peanut and rice plants in plastic pots) look exactly like the ordinary varieties from which he and his fellow researchers created them, but Blumwald's goal is to create crops that won't die as quickly when things get hot, dry, and stressful—plants that will improve the odds that a farmer can produce food even in a drought.

- In about forty years, dry spells may be more frequent across the Southwest, say climate scientists, and California may have more dry years like this most recent one, in which a drought has crippled agriculture. But the state, one of the most fiercely contested battlegrounds in a worldwide fight over the use of genetically modified organisms (GMOs), isn't the most inviting home for research like Blumwald's. Since the 1980s, opponents of GMOs have run a series of campaigns to require the labeling of genetically modified products and an outright ban on planting GMO crops. Blumwald says the controversy over GMOs has made it more difficult to pursue his research and obtain funding. And even if his GM plants could be an important part of the solution to climate change, they may never make their way into the hands of farmers.

- Many researchers argue that the bad reputations of big agricultural companies and misdirected public outrage are stifling important advances in agriculture that could help prevent famine, fight crop diseases, and cope with climate change. But whether Blumwald's plants—or the hundreds of other GM crops designed to be climate-change-resistant or otherwise useful in feeding the world—ever make it to farm fields may depend a lot on whether the public can be persuaded that the technology is able to produce worthwhile results.

11

Compared to Passage 1, Passage 2 is

- A) more extensively researched.
- B) more objective in tone.
- C) more reflective of the author's beliefs.
- D) broader in its focus.

12

Both passages directly support which of the following statements?

- A) GMOs should not be planted in regions that are not experiencing drought or extreme heat.
- B) The public does not trust the big agricultural companies that support the use of GMOs.
- C) Farmers have become increasingly reliant on GMO crops.
- D) Researchers have not yet developed effective drought- or heat-resistant plants.

13

Which of the following best describes the difference between the two passages?

- A) Passage 1 argues against GMO research, while Passage 2 argues in favor of it.
- B) Passage 1 is informational, while Passage 2 is persuasive.
- C) Passage 1 takes a clear position on GMOs, while Passage 2 examines an effect of the GMO controversy.
- D) Passage 1 indicates that GMOs are not useful for surviving drought, while Passage 2 demonstrates that they are.

14

It can be inferred that the authors of both passages are interested in

- A) the long-term effects of planting genetically modified crops.
- B) the status of the debate regarding the labeling of foods containing GMOs.
- C) the economic benefits of developing genetically modified seeds.
- D) the continued funding of Eduardo Blumwald's research.

15

Passage 1 most strongly suggests which of the following about GMOs?

- A) Genetic modification is the most effective method of preventing crop loss for farmers.
- B) Genetic exchanges of DNA between species always occur through artificial processes.
- C) GMOs offer a safe alternative to traditional plants for those who want tastier fruits and vegetables.
- D) GMOs are more profitable for the large corporations that create them than they are helpful to the farmers who plant them.

16

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 28-29 ("Farmers ... company")
- B) Lines 29-31 ("Farmers ... resistant")
- C) Lines 32-34 ("the farmer ... year")
- D) Lines 34-37 ("It also ... agriculture")

17

As used in line 9, "mimics" most nearly means

- A) apes.
- B) impersonates.
- C) imitates.
- D) emulates.

18

Which of the following best expresses the main point of Passage 2?

- A) Those who oppose GMOs should suspend judgment until Blumwald's research is complete.
- B) Genetically modified plants will prevent the droughts of the next 40 years from diminishing the food supply.
- C) Big agricultural companies oppose research of GM plants and have thus earned a bad reputation.
- D) Without the support of the public, researchers may not be able to determine whether GMOs are a useful solution to some of the world's major problems.

19

The author of Passage 2 indicates that Blumwald's research

- A) has been negatively affected by public perception of GMOs.
- B) is the solution to famine and disease.
- C) has calmed the public's fear of the upcoming drought.
- D) has crippled agriculture in the state of California.

20

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 52-53 ("In about ... Southwest")
- B) Lines 55-56 ("a drought ... agriculture")
- C) Lines 60-62 ("Since the 1980s ... products")
- D) Lines 63-65 ("Blumwald ... funding")

21

As used in line 71, "stifling" most nearly means

- A) hindering.
- B) choking.
- C) silencing.
- D) oppressing.

**Questions 22-31 are based on the following passage.**

This passage is adapted from B. Pitt, *World War II: The Battle of the Atlantic*. ©1980 by Time-Life Books.

The Battle of the Atlantic for the crucial shipping lanes between North America and Britain began in the mid-1940s and did not end until 1944.

Line (5) Because the routes were used to deliver food, raw materials, equipment, munitions, and oil to the British, the three-year fight to secure their control was critical for Allied success. The German military attempted to demolish the naval highway with both surface ships and submarines, known as (10) "U-boats," as well as with mines and aircraft. Over time, the Germans managed to sink several million tons of freight, even as the Allies responded with naval convoys of merchant and civilian ships. Two incidents in 1941, the sinking of the USS Robin (15) Moore and the USS Reuben James by German U-boats, drew the United States further into the Battle of the Atlantic.

(20) As they had done in World War I, German submarines, also known as U-boats, hunted their prey in "wolf packs." They used a new type of radio transmitter to stalk the merchant ships, which were slow and had little means to protect themselves. Once an Allied convoy was identified, the U-boat would alert its sister ships who would (25) converge, then wait until nighttime to attack.

(30) In just six months in 1942, U-boats had sunk more than 500 merchant ships. In early 1943, German U-boats were going about their deadly business virtually unscathed, and the German navy included over 500 U-boats. In March 1943 alone, German submarines sank more than 20 escorted Allied merchant ships. For Britain, which was running low on fuel, the Nazis' continued success constituted a crisis.

(35) Finally, during April and May 1943, the Allies began making headway stemming the devastation. They increased the number of escort ships per convoy, produced new destroyers, and dispatched new planes to aid in the detection and destruction (40) of U-boats. In those two months alone, the Allies blew up 45 U-boats, and German shipyards were unable to produce replacements fast enough to make up for the losses.

(45) By 1944, the mines placed in German shipping lanes by Allied vessels had begun to take their toll on the Nazi war machine. Shipments of iron ore needed to manufacture armor-plated Panzer III and IV tanks had come to a near halt at a

(50) moment the Germans could ill-afford to stop production. At the same time, the German military was growing increasingly concerned that the Allies were preparing to stage an invasion through Norway.

(55) One of the Nazis' menacing bulwarks against the Allies was a battleship so large it was classified as a "fleet in being," or a fleet all on its own. The ship, named the Tirpitz, had been built to destroy Royal Navy battleships. But its size also posed drawbacks. After a battle, the German navy (60) sometimes needed three months to resupply the Tirpitz with fuel, so the vessel saw little fleet action. Instead, it typically spent its days in or near port guarding the Norwegian coastline.

(65) For the Allies, the Tirpitz posed an alluring target, and they had unsuccessfully attempted to sink the ship after it was first launched. Finally, in November 1944, a squadron of Royal Air Force bombers located the Tirpitz in a Norwegian port. Over 800 feet long, the ship provided an excellent (70) target. The bombers sent in 12,000-pound bombs and blew a gigantic hole in the hull. The boat turned on its side, trapping and killing close to 1,000 men inside. The destruction of the Tirpitz was another blow to the Germans at a point in the war when they (75) were losing ground.

22

The author would most likely agree with which of the following statements?

- A) The Tirpitz was such a powerful ship that it managed to block the Atlantic shipping lanes throughout most of the war.
- B) The Allies began to gain an advantage in the Battle of the Atlantic when they blocked iron ore shipments, preventing the Germans from rebuilding their U-boat fleet.
- C) The Atlantic shipping lanes between North America and Britain were critical to the success of the war effort.
- D) The United States was uninvolved in the Battle of the Atlantic until after the sinking of two key ships.

CONTINUE



23

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 4-7 (“Because the routes ... Allied success”)
- B) Lines 13-17 (“Two incidents ... Battle of the Atlantic”)
- C) Lines 46-50 (“Shipments of iron ... stop production”)
- D) Lines 54-56 (“One of the ... on its own”)

24

As used in line 6, “secure” most nearly means

- A) ensure.
- B) obtain.
- C) capture.
- D) fasten.

25

The author most likely uses the word “stalk” (line 21) in order to emphasize the contrast between

- A) the technology of the U-boats and that of the merchant ships.
- B) the defensive strategies of the merchant ships and the engagement techniques of the German submarines.
- C) the destruction of more than 500 merchant ships and the sinking of the USS Robin Moore and the USS Reuben James.
- D) the weakness of the merchant ships and the power of a coordinated U-boat attack.

26

All of the following choices provide evidence for the previous question EXCEPT

- A) Lines 18-20 (“German submarines ... wolf packs”)
- B) Lines 21-23 (“the merchant ships ... protect themselves”)
- C) Lines 24-25 (“the U-boat ... to attack”)
- D) Lines 29-30 (“the German ... U-boats”)

27

What is the author’s purpose in stating that Britain was “running low on fuel” (line 33) ?

- A) To emphasize the primary reason Germany sought control of the Atlantic
- B) To provide one reason why the Nazis’ victories in the Atlantic were detrimental for the British
- C) To explain why the merchant convoys fared so badly against the Germans
- D) To compare the shortages in Britain to the shortages of iron ore in Germany

28

As used in line 38, “dispatched” most nearly means

- A) destroyed.
- B) transmitted.
- C) sent out.
- D) dismissed.

29

What is the relationship between the third paragraph (lines 26-34) and the fourth paragraph (lines 35-43) ?

- A) They highlight the destruction that occurred on both sides of the conflict and show how the Allies gained the advantage.
- B) They demonstrate the difference between the strength of the German Navy and that of the Allies.
- C) They emphasize the importance of resources such as fuel and iron ore to the war efforts on both sides.
- D) They compare the skill of the U-boat commanders with the skill of the captains of the Allied fleet.

30

All of the following were drawbacks to the size of the Tirpitz EXCEPT

- A) needing an extended time for refueling.
- B) providing an easy target for bombers flying overhead.
- C) being outfitted with a large crew.
- D) requiring more time in or near port than other ships.

CONTINUE

It can reasonably be inferred from the passage that the Nazis kept the Tirpitz “guarding the Norwegian coastline” (line 63) because

- A) Norway’s ports were the best sources for fuel.
- B) there was worry that the Allies would launch an attack on Germany by way of Norway.
- C) the coastal waters off Norway were deep enough to accommodate the Tirpitz’s great size.
- D) Norway was a vital strategic point for the control of the Atlantic’s “naval highway.”

**Questions 32-42 are based on the following passage.**

This passage is adapted from Paul Wapner, "Ecological Displacement and Transnational Environmental Justice." ©2002 by Paul Wapner. Wapner discusses the ethical dimensions of ecological displacement.

Human beings do not solve environmental problems so much as displace them. They transport the harmful effects of pollution and resource extraction across time and space, leaving others to experience the detrimental effects of environmental abuse. For example, when people use nuclear technologies and leave radioactive by-products to future generations, they displace environmental issues across time; when communities generate an overabundance of solid waste and export it to other communities, they displace it across space. Displacement is about shifting the experience of environmental harm. It is about postponing or evading the harmful effects of environmental degradation. And, because this disproportionately affects the less powerful, it raises moral issues.

Ecological displacement across space and time involves two aspects of environmental degradation. The first is related to resources. Human beings draw resources from the earth to provide energy, food, and other materials for life. They rarely do so, however, at a rate at which the natural environment can replenish itself, which means that much resource use is unsustainable in the long term. Resource extraction involves displacement insofar as it involves taking resources from some areas and current populations without sufficiently compensating supply areas for future generations. In short, it displaces the experience of resource depletion across both time and space.

The second aspect of environmental degradation is related to pollution. Most forms of manufacturing, energy production, and the human use of materials and machines generate by-products in the form of solid waste, ambient particulates, and excess heat. Human beings dispose of these by dumping them in waterways, the air, and on land with the expectation that these systems will break down the waste and reabsorb it into the earth. Often humans produce waste beyond the absorptive capacity of the environment. When this happens, they generally displace the problem by sending pollution to other parts of the earth or leaving it to be addressed by future generations. Pollution can thus be considered a

matter of displacement when it involves moving the detrimental dimensions of environmental harm across space and time. It enables current generations to enjoy the fruits of pollution while forcing others to bear the adverse ecological effects.

Shadow ecologies are the unseen and often undervalued dimensions of the ecology of a country, community, or city. New York City, for example, pulls resources from and exports its waste to areas well beyond Manhattan Island; the same is true of Japan, Germany, New Zealand, and China. Shadow ecologies and the dynamics of exploitation that occur within them make clear the issue of environmental ethics. If people living in the shadows are treated as less deserving than those who enjoy the primary benefits of resource use and waste generation, questions of justice and equal moral worth arise.

Cultivating an ethical perspective on international environmental affairs, however, is not simply a philosophical exercise but has consequences for policy. Ethical principles have the power to at least partially shape political understanding and practice, especially since they appeal to one's sense of virtue and duty. Many international environmental agreements already implicitly address ethical concerns. They aim to be fair to negotiating parties and careful not to displace adverse effects onto non-involved parties. Nonetheless, the implicit character of this focus compromises the advancement of ethical dialogue. Failing to express or declare openly the ethical dimension in international agreements, policymakers express their efforts in the language of interests and expediency, and so seem to avoid the moral ground on which they stand.

32

The main purpose of the passage can best be described as

- A) arguing for legislation that regulates the use of resources.
- B) raising awareness of ethical considerations involved in the treatment of the environment.
- C) showing that there is little reason to change resource use and waste generation.
- D) accusing manufacturers of negligence in the disposal of their by-products.

CONTINUE

33

The author uses the examples of leaving “radioactive by-products” (lines 7-8) and generating an “overabundance of solid waste” (lines 10-11) in order to

- A) inspire future generations to develop a greater capacity for solving environmental problems.
- B) show how humans will fully destroy their environment.
- C) express the concern that some problems of technological advancement cannot be avoided.
- D) illustrate his point that human beings pass on rather than solve environmental problems.

34

As used in line 29, “compensating” most nearly means

- A) holding responsible.
- B) repaying.
- C) replenishing.
- D) planning revisions for.

35

Ecological displacement involves what two aspects of environmental degradation?

- A) Evolution and commerce
- B) Depletion and contamination
- C) Energy by-products and polluted waterways
- D) Pollution and apathy

36

Based on the third paragraph (lines 32-51), which choice best describes the relationship between human-produced waste and the environment?

- A) The environment has the ability to break down waste, but is overwhelmed by the amount produced by humans.
- B) Some environments have the capability to maintain equilibrium, but human waste is often shipped to environments that cannot handle the amount generated.
- C) The environment is currently able to handle the amount of waste created by humans, but in the future it will not be able to.
- D) Humans believe the environment can absorb and process human waste, but the environment does not have this ability.

37

As used in line 48, “dimensions” most nearly means

- A) sizes.
- B) aspects.
- C) categories.
- D) context.

38

The author most likely uses the term “shadow ecologies” (line 52) in order to

- A) identify the moral implications of extracting resources from and diverting wastes to unwilling populations.
- B) question whether the people affected by environmental displacement deserve the benefits of modern society.
- C) illustrate how such ecologies treat certain people with justice and moral consideration.
- D) make the point that certain countries are ignored by the more industrial nations.

39

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 52-54 (“Shadow ... city”)
- B) Lines 56-57 (“the same ... China”)
- C) Lines 58-60 (“Shadow ... ethics”)
- D) Lines 60-64 (“If people ... arise”)

40

Throughout the passage, the author repeats and emphasizes the concept of displacement in order to

- A) make clear the moral considerations which must accompany environmental decisions.
- B) argue for greater legislation to control the spread of pollutants.
- C) illustrate the more human aspects of environmental degradation.
- D) introduce the notion that those who are underrepresented never have a chance to achieve equal representation.

41

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 2-4 (“They transport ... space”)
- B) Lines 16-17 (“because this ... issues”)
- C) Lines 41-42 (“Often humans ... environment”)
- D) Lines 65-68 (“Cultivating ... policy”)

42

What would be the likely effect if policymakers did “express or declare openly” (line 78) ethical principles in their international agreements?

- A) Ecological displacement would cease.
- B) The advancement of ethical dialogue would be less compromised.
- C) The policies and agreements would appeal less to one’s sense of virtue and duty.
- D) The policymakers would have a stronger moral ground to stand on.

CONTINUE

**Questions 43-52 are based on the following passage.**

This passage is adapted from Michael Crichton, *The Lost World*. ©1995 by Michael Crichton.

Levine appeared indifferent to the tension in the room. “Just this,” he said. “During the Cretaceous, *Dinosauria* were widely distributed across the planet. We have found their remains on every continent, and in every climatic zone—even in the Antarctic. Now, if, as you propose, their extinction was really the result of their behavior, and not the consequence of a catastrophe, or a disease, or a change in plant life, or any of the other broad-scale explanations that have been proposed, then it seems to me highly unlikely that they all changed their behavior at the same time, everywhere. And that in turn means that there may well be some remnants of those animals still alive on the earth. Why couldn’t you look for them?”

“You could,” Malcolm said coldly, “if that amused you. And if you had no more compelling use for your time.”

“No, no,” Levine said earnestly. “I’m quite serious. What if the dinosaurs did not become extinct? What if they still exist? Somewhere in an isolated spot on the planet.”

“You’re talking about a Lost World,” Malcolm said, and heads in the room nodded knowingly. Scientists at the Institute had developed a shorthand for referring to common evolutionary scenarios. They spoke of the Field of Bullets, the Gambler’s Ruin, the Game of Life, the Lost World, the Red Queen, and Black Noise.

“No,” Levine said stubbornly. “I am speaking literally.”

“Then you’re badly deluded,” Malcolm said, with a dismissive wave of his hand.

The lecture ended. Malcolm hobbled across the open courtyard of the Institute, shortly after noon. Walking beside him was Sarah Harding, a young field biologist visiting from Africa. Malcolm had known her for several years, since he had been asked to serve as an outside reader for her doctoral thesis at Berkeley.

Crossing the courtyard in the hot summer sun, they made an unlikely pair: Malcolm dressed in black, stooped and ascetic, leaning on his cane; Harding compact and muscular, looking young and

- (45) energetic in shorts and a tee shirt, her short black hair pushed up on her forehead with sunglasses. Her field of study was African predators, lions and hyenas. She was scheduled to return to Nairobi the next day.
- (50) The two had been close since Malcolm’s surgery. Harding had been on a sabbatical year in Austin, and had helped nurse Malcolm back to health after his many operations. For a while it seemed as if a romance had blossomed, and that Malcolm, a confirmed bachelor, would settle down. But then Harding had gone back to Africa, and Malcolm had gone to Santa Fe. Whatever their former relationship had been, they were now just friends.
- (60) They discussed the questions that had come at the end of his lecture. From Malcolm’s point of view, there had been the predictable objections: that mass extinctions *were* important; that human beings owed their existence to the Cretaceous extinction, which had wiped out the dinosaurs and allowed the mammals to take over. As one questioner had pompously phrased it, “The Cretaceous allowed our own sentient awareness to arise on the planet.”
- (65) Malcolm’s reply was immediate: “What makes you think human beings are sentient and aware? There’s no evidence for it. Human beings never think for themselves; they find it too uncomfortable. For the most part, members of our species simply repeat what they are told—and become upset if they are exposed to any different view. The characteristic human trait is not awareness but conformity, and the characteristic result is religious warfare. Other animals fight for territory or food; but, uniquely in the animal kingdom, human beings fight for their ‘beliefs.’ The reason is that beliefs guide behavior, which has evolutionary importance among human beings. But at a time when our behavior may well lead us to extinction, I see no reason to assume we have any awareness at all. We are stubborn, self-destructive conformists. Any other view of our species is just a self-congratulatory delusion. Next question.”

43

Which of the following provides the most reasonable summary of the passage?

- A) A professor gives a stern lecture to an earnest student who believes that dinosaurs might still exist.
- B) A student nurses her elderly professor and good friend back to health and disagrees with him in regard to facts about dinosaurs.
- C) A professor's viewpoint is challenged, his relationship with a friend is outlined, and he shares his beliefs about the nature of humanity.
- D) A professor has an intellectual disagreement with a fellow professor, falls in love with his friend, and admonishes a scientist for his optimism.

44

Based on the passage, which choice best explains the relationship between Malcolm's and Levine's beliefs on dinosaur extinction?

- A) Malcolm believes that extinction occurred due to behavioral factors, whereas Levine believes only catastrophic factors caused extinction.
- B) Malcolm believes that extinction occurred because of behavioral factors and Levine believes it is doubtful that extinction resulted from behavior.
- C) Malcolm believes dinosaurs died off due to conformity, whereas Levine believes dinosaurs may have survived somewhere in the world.
- D) Malcolm and Levine agree that dinosaurs suffered a complete mass extinction arising from behavioral factors.

45

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 2-6 ("During the Cretaceous ... Antarctic")
- B) Lines 6-13 ("If ... everywhere")
- C) Lines 19-22 ("No ... planet")
- D) Lines 61-66 ("From Malcolm's ... take over")

46

The author refers to other evolutionary scenarios like "Field of Bullets" (lines 27-29) primarily to

- A) explain how each works in detail.
- B) provide evidence showing how difficult each is to understand.
- C) show how commonly known these named scenarios are among certain scientists.
- D) dismiss Levine's ideas outright.

47

As used in line 43, "stooped" most nearly means

- A) steady.
- B) hesitant.
- C) bent over.
- D) unintelligent.

48

The paragraphs from lines 34-59 serve mainly to

- A) highlight the contrasts between two competing professors.
- B) detail how Malcolm became a professor.
- C) indicate that Sarah Harding resents Malcolm for his previous unfaithfulness.
- D) introduce a new character and summarize her relationship with Malcolm.

49

As used in line 68, "sentient" most nearly means

- A) intelligent.
- B) conscious.
- C) moral.
- D) foolish.

CONTINUE

50

In the last paragraph (lines 69-87), Malcolm states that the flaws of human beings primarily result from

- A) a lack of foresight.
- B) an overabundance of knowledge.
- C) a lack of independence.
- D) a focus on being too self-congratulatory.

51

Which choice provides the best evidence for the answer to the previous questions?

- A) Lines 75-76 (“The characteristic ... conformity”)
- B) Lines 77-80 (“Other animals ... beliefs”)
- C) Lines 80-82 (“The reason ... beings”)
- D) Lines 82-84 (“at a time ... all”)

52

Malcolm’s tone in the last paragraph can best be described as

- A) cynical.
- B) genial.
- C) timely.
- D) dejected.



IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY. DO NOT TURN TO ANY OTHER SECTION IN THE TEST.



# Writing and Language Test

35 MINUTES, 44 QUESTIONS

**Directions:** Each passage below is accompanied by several questions which may ask you to consider revisions to improve expression of ideas or correct grammatical errors. Some questions may ask you to make editing decisions which involve a graphic (a table or chart). For each question, choose the answer that most effectively improves the passage. Select "NO CHANGE" to leave the underlined portion as it is.

Turn to Section 2 of your answer sheet to answer the questions in this section.

2

Questions 1-11 are based on the following passage.

Scientists have misunderstood much about hippopotamuses a lot over the years. Their name in ancient Greek translates to "river **1** horse" yet modern science linked the animals to pigs. The most recent studies have found they are more closely related to whales. They also don't sweat blood as once thought, but excrete a red fluid that contains antibacterial sunscreen. **2** Plus, the stubby-legged **3** burden-some creatures have surprised biologists with running speeds of up to 19 mph.

[1] Yet hippos prey only on grass.

[2] **4** Experiences with unlucky locals and tour guides have led to hippos' being named the most dangerous animals in Africa, allegedly responsible for more human deaths than lions. [3] They also have a well-documented reputation for aggression and engage in brutal battles over mates, slashing and biting with their lengthy incisor teeth. [4] One detail that cannot be misunderstood is that hippos are huge. **5**

1

- A) NO CHANGE
- B) horse," yet modern science linked
- C) horse" with modern science linking
- D) horse," and modern science linked

2

- A) NO CHANGE
- B) Nevertheless,
- C) Subsequently,
- D) Thus,

3

- A) NO CHANGE
- B) spherical
- C) overweight
- D) ponderous

4

Which choice best conveys the main idea of this paragraph?

- A) Odd confrontations
- B) Grisly encounters
- C) Disgusting clashes
- D) Unfortunate meetings

5

Which of the following would be the most logical arrangement for the sentences in this paragraph?

- A) (as it is now)
- B) 1, 4, 2, 3
- C) 3, 2, 1, 4
- D) 4, 3, 2, 1

CONTINUE

Recently, scientists have started to uncover some exceptional behavior that could change our opinion of the animals once again, especially their seemingly limited diet. Leejjah Dorward of Imperial College London writes in the African Journal of **6** Ecology: “I was in the southern end of Kruger National Park, crossing a river, when we saw two hippos in the water with a quite decayed, dead hippo surrounded by crocodiles.” **7** Dorward was surprised to see a known vegetarian feeding not only on meat, but on the meat of its own species.

“It was not until I did some reading on hippo diets that I realized how unreported this behavior was,” he said. In fact, Dorward’s record is only the second confirmed account of cannibalism by hippos in scientific literature. His is the latest piece in a puzzle Dr. Joseph Dudley of the University of Alaska **8** has been looking at for two decades.

Dr. Dudley made the first ever record of hippos eating meat back in 1995. Since then he has been collecting evidence of hippos eating impala, baby elephants, **9** and even eating their own kind. While the cannibalistic incidents still number fewer than a dozen, they have occurred across the animals’ range, from South Africa to Uganda.

6

- A) NO CHANGE
- B) Ecology: “I was
- C) Ecology—”I was
- D) Ecology. “I was

7

Which choice, if added to the quote, would provide the most relevant detail?

- A) “It was one of the most impressive and unusual sights we witnessed on our safari,” he said.
- B) “The hippo was in such a state of decomposition that we couldn’t understand why it was being eaten,” he said.
- C) “This was not initially that unique a sight until we saw one of the hippos feeding from the carcass,” he said.
- D) “We had no idea whether the crocodiles had killed the hippo or were simply competing for its carcass,” he said.

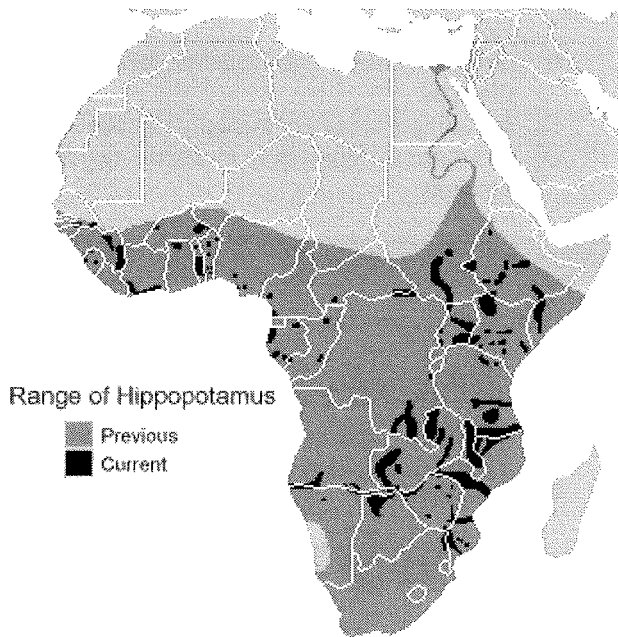
8

- A) NO CHANGE
- B) looked
- C) having been looked
- D) had been looking

9

- A) NO CHANGE
- B) and hippos also eat their own kind
- C) and even ate their own kind
- D) and even their own kind

Hippo expert Dr. Keith Eltringham had suggested previously that the animals are not predators but are driven to scavenge meat when food or particular nutrients are scarce. It's true that the animals are now facing increasing pressure from humans that hunt them for their meat and ivory teeth, **10** encroaching settlements, and growing competition for freshwater. "If carnivorous impulses are driven by dietary deficiencies in hippos, then **11** they'll become more dangerous during droughts or other times when their access to food is restricted," said Leejiah Dorward.



10

Which choice would be most consistent with the information provided in the graphic?

- A) their territory, their encroaching settlements
- B) reduced habitat from encroaching settlements
- C) diverse habitat, encroaching settlements
- D) an increasingly wide range, encroaching settlements

11

- A) NO CHANGE
- B) it may
- C) the hippos may
- D) the impulses will

Questions 12-22 are based on the following passage.

Colleen wakes at 7 a.m. for her yoga class. She has found that starting out her day with a relaxing activity helps alleviate the stress and anxiety associated with her job. By 8 a.m., she is ready to start her workday at a behavioral health non-profit clinic, **12** and she is the clinical psychologist manager.

Colleen's first patient is a woman named Gabrielle. Gabrielle has been seeing Colleen for three months, ever since she left an abusive marriage. The mission statement of the non-profit states that the clinic strives to empower people so that they can live independently. Gabrielle is making a go of it after moving out of the women's shelter. **13** Their clients include women getting out of abusive situations, children coping with stress, **14** and it also includes people with moderate mental illnesses.

Colleen and Gabrielle chat for a few minutes about her progress finding a job, while Colleen **15** scribbles away on her notepad. After every session with a patient, she writes extensive case notes, which document what **16** came to pass during the hour-long session. In addition, case notes provide a clear outline of the services provided by the clinical psychologist to the patient. Psychologists must be able to identify the mental needs of the patient and what they can do to facilitate these needs being met. Unlike psychiatrists, they can't just give up and prescribe a bunch of meds.

12

- A) NO CHANGE
- B) which she is the clinical psychologist manager of
- C) where she is the clinical psychologist manager
- D) because she is the clinical psychologist manager

13

- A) NO CHANGE
- B) Its
- C) They're
- D) The clinic's

14

- A) NO CHANGE
- B) along with those with moderate mental illnesses
- C) including moderately mentally ill people
- D) and those suffering from moderate mental illnesses

15

Which choice provides the most expressive option?

- A) NO CHANGE
- B) composes
- C) writes
- D) sketches

16

All of following would be suitable revisions for the underlined portion EXCEPT

- A) occurred during
- B) transpired in
- C) took place during
- D) happened with

**17** Gabrielle lists some meditative methods that she recently learned in a group session. Colleen agrees that closing her eyes and **18** breathed slowly in and out while listening to soothing music is a good idea, but **19** feels her alternate method of driving her Ford F-150 through the wall of her ex-boyfriend's house may be slightly less productive. After the hour is up, Colleen says good-bye to Gabrielle and polishes up her notes for a final report.

[1] The rest of Colleen's afternoon **20** consists of supervising interns' patient sessions to provide feedback and support. [2] By the end of the workday, she is pretty worn out. [3] She imagines herself back on her yoga mat, performing some relaxing stretches, particularly the eagle pose. [4] On the way to her car, Colleen sees a patient whom she used to counsel. [5] Denise had a troubled childhood bouncing from foster home to foster home. [6] Her chaotic past left her with severe anxiety problems. [7] Colleen worked with her for a year before Denise set out on her own three years ago, determined never to set foot in a foster home again. **21**

**17**

Which of the following sentences provides the best introduction to the fourth paragraph?

- A) Colleen asks Gabrielle to think of some methods she can use to help cope with feelings of anxiety.
- B) Gabrielle is allergic to most prescription medications, so Colleen suggests other methods of dealing with anxiety.
- C) Colleen decides to give Gabrielle a test to see how well she remembers what she's been taught.
- D) Gabrielle feels awkward at first until she thinks of something she can say.

**18**

- A) NO CHANGE
- B) breathing
- C) breathes
- D) having breath

**19**

- A) NO CHANGE
- B) felt
- C) feeling
- D) has felt

**20**

- A) NO CHANGE
- B) consisted
- C) consist
- D) consisting

**21**

To improve the focus of the fifth paragraph, which of the following sentences should be deleted?

- A) Sentence 1
- B) Sentence 2
- C) Sentence 3
- D) Sentence 6

Colleen and Denise talk about the program for a few minutes. As Colleen pulls out of the parking lot, she thinks of the transformation that Denise was able to make. **22**

**22**

Which of the following sentences provides the best conclusion to the last paragraph?

- A) She wishes she could make a transformation in her own life.
- B) She smiles, knowing that Denise couldn't have made it without her help.
- C) Knowing that her work has benefitted others helps Colleen forget her own fatigue and stress.
- D) Colleen swells with pride and speeds home to celebrate.

**CONTINUE**

Questions 23-33 are based on the following passage.

At the Second Continental Congress during the summer of 1776, Thomas Jefferson of Virginia **23** was charged with drafting a formal statement justifying the thirteen North American colonies' break with Great Britain. On June 11, Jefferson was appointed to a five-man committee, which also included John Adams and Benjamin Franklin. Jefferson was the only Southerner on the committee, and had arrived in Philadelphia accompanied by three of his many slaves. Still, it was **24** he who was given the task of drafting the Declaration of **25** Independence, which would become the foremost statement of human liberty and equality ever written. According to an account Jefferson wrote in 1823, the other members of the committee "unanimously pressed on myself alone to undertake the draft. I consented; I drew it; but before I reported it to the committee I communicated it separately to Dr. Franklin and Mr. Adams requesting their corrections... I then wrote a fair copy, reported it to the committee, and from them, unaltered to the Congress."

The body of Jefferson's draft **26** contain a list of grievances against the British **27** crown. It was its preamble that would strike the deepest chords in the minds and hearts of future Americans: "We hold these truths to be self-evident; that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed."

23

- A) NO CHANGE
- B) was given the duty of having to draft
- C) was charged to draft
- D) received the job of making a draft that would declare

24

- A) NO CHANGE
- B) him
- C) himself
- D) his

25

- A) NO CHANGE
- B) Independence which would
- C) Independence that would
- D) Independence to

26

- A) NO CHANGE
- B) contained
- C) containing
- D) had contained

27

Which choice most effectively combines the sentences at the underlined portion?

- A) crown, for it was its preamble which struck
- B) crown, but it was its preamble that would strike
- C) crown, its preamble striking
- D) crown since its preamble struck

The Continental Congress reconvened on July 1, and the following day twelve of the thirteen colonies adopted the resolution for independence. The process of consideration and revision of Jefferson's declaration (including **28** Adams' and Franklin's corrections) continued on July 3 and into the late morning of July 4, during which Congress deleted and revised some one-fifth of its text. The delegates made no changes to that key preamble, however, and the basic document remained Jefferson's words. Congress officially adopted the Declaration of Independence later on July 4 (though most historians now **29** except that the document was not signed until August 2).

[1] Thomas Jefferson wasn't recognized as the **30** principled author of the Declaration of Independence until the 1790s; until **31** that decade the document was presented as a collective effort by the entire Continental Congress. [2] Jefferson had returned to the Virginia legislature in the late summer of 1776, and in 1785 had succeeded Franklin as minister to France. [3] He served as Secretary of State in the cabinet of President George Washington. **32** [4] He later emerged as a leader of the Republican party. [5] It was a Republican party that championed states' rights and opposed the strong centralized government. [6] Alexander Hamilton's Federalists favored such a government. [7] Elected as the nation's

28

- A) NO CHANGE
- B) Adam and Franklin's
- C) Adam's and Franklin's
- D) Adams's and Franklins's

29

- A) NO CHANGE
- B) excepting
- C) accept
- D) exempt

30

- A) NO CHANGE
- B) principal
- C) primarily
- D) principle

31

Assuming they are factually correct, all of the following would be suitable replacements for the underlined portion EXCEPT

- A) then
- B) 1794
- C) that time
- D) those years

32

Which choice most effectively combines sentences 4, 5, and 6 ?

- A) Later emerging as a leader of the Republican party, Jefferson belonged to this party that championed states' rights and opposed Alexander Hamilton's Federalists' concept of a strong centralized government.
- B) Jefferson later emerged as a leader of the Republican party, which championed states' rights and opposed the strong centralized government favored by Alexander Hamilton's Federalists.
- C) He emerged as a leader of the Republican party later; it championed states' rights, and also opposed the strong centralized government favored by Alexander Hamilton's Federalists.
- D) Jefferson eventually emerging as a leader in the Republican party, he championed states' rights, opposing the strong centralized government which was being favored by Alexander Hamilton's Federalists.

CONTINUE



third president in 1800, Jefferson would serve two

**33** terms.

**33**

Assuming the following additions to the last sentence are factually correct, which one best conveys a sense of Jefferson's achievements as president?

- A) terms, but everyone today remembers him for one big thing: he wrote the Declaration of Independence!
- B) terms, during which he doubled the young nation's territory while striving to maintain its neutrality during the Napoleonic Wars.
- C) terms; afterward, he retired to his home at Monticello and wrote a lot of books.
- D) terms, but he decided not to run for a third term, following the precedent set by Washington.

CONTINUE

Questions 34-44 are based on the following passage.

Shin Dong-hyuk told a powerful story about the misery of life in a North Korean prison camp, becoming the most famous defector from that notoriously reclusive country. His story seemed well-documented. Veteran journalist Blaine Harden brought him to prominence in a 2012 book, *Escape from Camp 14*, which has been published in twenty-seven languages. Shin's testimony played a role in a United Nations report condemning North Korea for human rights violations.

34 Shin says some parts of his account were not true.

His story raises the tricky question of authenticating information from North Korea and other largely closed societies where 35 excess to journalists and other outsiders 36 range from extremely limited to nonexistent. Harden says he learned that Shin "had told friends an account of his life that differed substantially from 37 the book."

Harden goes on to quote Shin as saying: "[1] I didn't want to tell exactly what happened in order not to relive these painful moments all over again. [2] When I agreed to share my experience for the book, I found it was too painful to think about some of the things that happened. [3] I altered some details that I thought wouldn't matter. [4] In other words, I made a compromise in my mind." 38

Shin maintains he accurately described his basic story. He says he was indeed born at Camp 14, north of the capital Pyongyang, and that he was subjected to torture. But he originally said he spent his whole life at that camp until he escaped in 2005, when he was in his early 20s. Now he says that when he was 6, he and his family 39 were transferred to a nearby prison, Camp 18. There, he says, he witnessed the execution of his mother and brother. He also now says he escaped the

34

Which choice provides the best transition between paragraphs?

- A) Still, Shin
- B) Now, however, Shin
- C) Finally, Shin
- D) Furthermore, Shin

35

- A) NO CHANGE
- B) excessiveness
- C) access
- D) accessibility

36

- A) NO CHANGE
- B) ranging
- C) ranged
- D) ranges

37

- A) NO CHANGE
- B) the books
- C) that of the book
- D) those of the book

38

Which of the following would be the best arrangement for the sentences in the quote from Shin?

- A) NO CHANGE
- B) 2, 4, 3, 1
- C) 2, 1, 3, 4
- D) 4, 2, 3, 1

39

- A) NO CHANGE
- B) was being transferred
- C) had been transferred
- D) transferred

camp twice as a teenager: once in 1999, and once in 2001. After his second escape, he says, he managed to reach **40** China. He was arrested and sent back to North Korea for punishment in the more brutal Camp 14. He'd originally said he was 13 at the time of the torture **41** leaving his back scarred. Now he says he was 20 when that happened.

Other North Korean defectors have raised questions about Shin's account. Harden acknowledged the fact-checking limitations, writing in the book: "There was, of course, no way to **42** tell what he was saying. Shin was the only available source of information about his early life. His mother and brother were dead. His father was still in the camp or perhaps dead too. **43** Still, the story had been vetted and rang true to survivors of other labor camps, to scholars, to human rights advocates, and **44** the South Korean government."

40

Which choice most effectively combines the sentences at the underlined portion?

- A) China; therefore, he
- B) China and then
- C) China and subsequently he
- D) China but

41

- A) NO CHANGE
- B) that left his back scarred
- C) and his back was scarred by it
- D) and the scarring of his back that resulted from it

42

- A) NO CHANGE
- B) conform
- C) determine
- D) confirm

43

Which of the following sentences, if added to Hardin's quote at this point, would most effectively support the idea that there was little information available to verify Shin's story?

- A) No one in South Korea was familiar with Camp 14, so they weren't any help.
- B) I didn't know him before either, so I didn't know if he was telling the truth or not.
- C) Everyone who knew Shin is also probably dead or in the camp.
- D) The North Korean government could hardly set the record straight, since it denies that Camp 14 exists.

44

- A) NO CHANGE
- B) to the South Korean government
- C) the South Korean government also thought it was true
- D) was believed by the South Korean government



IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY. DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Math Test



Turn to Section 3 of your answer sheet to answer the questions in this section.

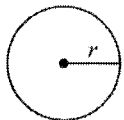
# 3

25 MINUTES, 20 QUESTIONS

For questions 1-20, solve each problem, choose the best answer from the choices provided, and fill in the corresponding circle on your answer sheet. For questions 16-20, solve the problem and enter your answer in the grid on the answer sheet. Please refer to the directions before question 16 on how to enter your answers in the grid. You may use any available space in your test booklet for scratch work.

### Notes:

1. The use of a calculator **is not permitted**.
2. All variables and expressions used represent real numbers unless otherwise indicated.
3. Figures provided in this test are drawn to scale unless otherwise indicated.
4. All figures lie in a plane unless otherwise indicated.
5. Unless otherwise indicated, the domain of a given function  $f$  is the set of all real numbers  $x$  for which  $f(x)$  is a real number.

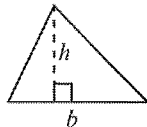


$$A = \pi r^2$$

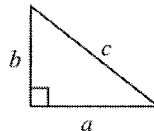
$$C = 2\pi r$$



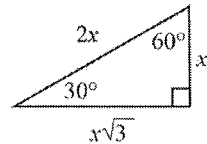
$$A = lw$$



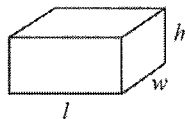
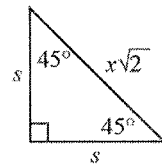
$$A = \frac{1}{2}bh$$



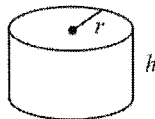
$$c^2 = a^2 + b^2$$



Special Right Triangles



$$V = lwh$$



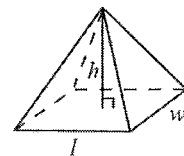
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}lwh$$

The number of degrees of arc in a circle is 360.

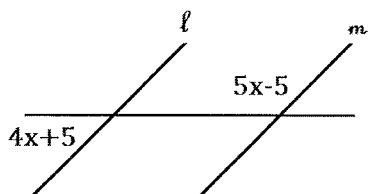
The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE



1



If line  $l$  is parallel to line  $m$ , then what must the value of  $x$  be?

- A) 10
- B) 5
- C) 20
- D) 1

2

What is the  $y$ -intercept of the following linear equation?

$$2(x + 3) = 3(x - 2y + 4)$$

- A) 1
- B)  $-1$
- C)  $-\frac{1}{2}$
- D)  $-7$

CONTINUE



3

A drive-in theater charges \$8 per truck and \$5 per car. Last weekend there was a total of 176 vehicles and the theater made \$1,051. Which of the following systems of equations properly describes the situation, assuming  $x$  is the number of cars and  $t$  is the number of trucks?

- A)  $1,051 = (8 + 5)(x + t)$   
 $5x + 8t = 176$
- B)  $1,051 = 5x + 8t$   
 $x + t = 176$
- C)  $1,051 = 5t + 8x$   
 $x + t = 176$
- D)  $1,051 + 5t = 8x$   
 $5x + 8t = 176$

4

$$4x + 6 = 10y - 6$$

$$x + 1 = 2y$$

Using the system of equations above, what is the value of  $2xy$ ?

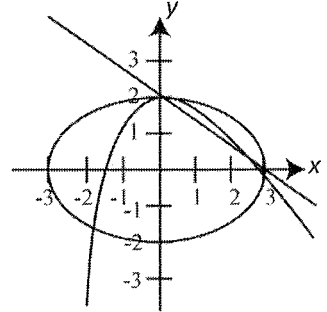
- A) 28  
 B) 56  
 C) 14  
 D) 7

5

$$y = -\frac{2}{9}x^2 + 2$$

$$\frac{x^2}{9} + \frac{y^2}{4} = 1$$

$$y = -\frac{2}{3}x + 2$$



Based upon the system of equations above and their respective graphs, how many unique solutions does the system contain?

- A) 0  
 B) 1  
 C) 2  
 D) 3

6

If  $f(x) = 3x - 3$  and  $g(x) = x^2 - 1$ , what is the value of  $g(f(2))$ ?

- A) 6  
 B) 12  
 C) 9  
 D) 8



7

Function  $f$  is defined by  $f(x) = x^3 - 4x^2 + x + 6$ . If the function has a root at  $x = 2$ , what are the other roots of  $f(x)$ ?

- A)  $x = -1, 3$
- B)  $x = -2, 0$
- C)  $x = 0, 2$
- D)  $x = -3, 1$

8

$$\frac{4}{3x-5} = \frac{3}{x+1}$$

Based on the equation above, what is one possible value of  $x$ ?

- A)  $\frac{19}{5}$
- B)  $\frac{13}{7}$
- C)  $\frac{5}{19}$
- D) 19

9

If the rational expression  $\frac{3x^2}{3x-1}$  is rewritten

in the equivalent form  $\frac{\frac{1}{3}}{3x-1} + A$ ,

what must expression  $A$  be in terms of  $x$ ?

- A)  $x + \frac{1}{3}$
- B)  $x + 1$
- C)  $x - 1$
- D)  $x - 3$

10

When one rents a motorboat, there is an initial cost of \$30 and a follow-up fee of \$5 per gallon of gas used. If the motorboat gets 34 nautical miles to the gallon, which of the following functions models the cost with respect to  $x$ , the distance travelled?

- A)  $f(x) = 34 + \frac{5x}{30}$
- B)  $f(x) = 34 + \frac{30x}{5}$
- C)  $f(x) = 5 + \frac{34x}{30}$
- D)  $f(x) = 30 + \frac{5x}{34}$



11

If sphere  $O$  has a great circle with circumference  $6\pi$ , what is the volume of sphere  $O$ ? The equation for the volume of a sphere with radius  $r$  is as follows:

$$V = \frac{4}{3}\pi r^3$$

- A)  $24\pi$
- B)  $12\pi$
- C)  $36\pi$
- D)  $144\pi$

12

If  $-\frac{4}{3} < 3x - 4 \leq \frac{6}{7}$ , what is one possible value of  $12 - 9x$ ?

- A) 3
- B) 4
- C) 5
- D) 6

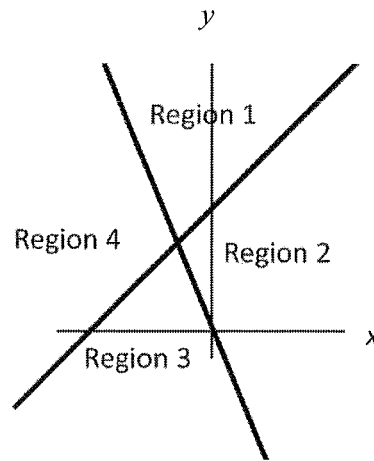
13

$$\begin{aligned}x^2 + y^2 &= 250 \\ y - 3 &= -3(x + 1)\end{aligned}$$

If the ordered pair  $(x, y)$  is a solution to the system of equations above, what is the value of  $x^2 - x$ ?

- A) -20
- B) -210
- C) 240
- D) 30

14



$$y \geq -2x$$

$$-y > -x - 3$$

Which of the following areas contains the solutions to both sets of equations?

- A) Region 1
- B) Region 2
- C) Region 3
- D) Region 4

15

If  $p$  is a natural number and  $p^2 = 11p + 60$ , then which of the following represents the possible value(s) of  $p$ ?

- A)  $p = -15, 4$
- B)  $p = -4, 15$
- C)  $p = 15$
- D)  $p = -4$





Each of the remaining questions requires you to solve the problem and enter your answer by marking the circles in the special grid, as shown in the examples below. You may use any available space for scratch work.

Answer: 201

Either position is correct

7	/	1	2
	●	/	
○	○	○	○
	0	0	0
1	1	●	1
2	2	2	●
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
●	7	7	7
8	8	8	8
9	9	9	9

← Fraction line

	2	.	5
	○	/	
○	○	●	○
	0	0	0
1	1	1	1
2	●	2	2
3	3	3	3
4	4	4	4
5	5	5	●
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Decimal point

	2	0	1
	○	/	
○	○	○	○
	0	●	0
1	1	1	●
2	●	2	2
3	3	3	3
4	4	4	4

	2	0	1
	○	/	
○	○	○	○
	●	0	0
1	1	●	1
●	2	2	2
3	3	3	3
4	4	4	4

- Mark no more than one circle in any column.
- Because the answer sheet will be machine-scored, you will receive credit only if the circles are filled in correctly.
- Although not required it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- No question has a negative answer.
- Mixed numbers such as  $3 \frac{1}{2}$  must be gridded as 3.5 or 7/2.

(If 

3	1	/	2
○	○	○	○
○	○	○	○

 is gridded, it will be

interpreted as  $\frac{31}{2}$  not  $3 \frac{1}{2}$ .)

**Decimal Answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid. For example, if you obtain an answer such as 0.6666... you should record your result as .666 or .667. A less accurate value such as .66 or .67 will be scored as incorrect.

Acceptable ways to grid  $\frac{2}{3}$  are:

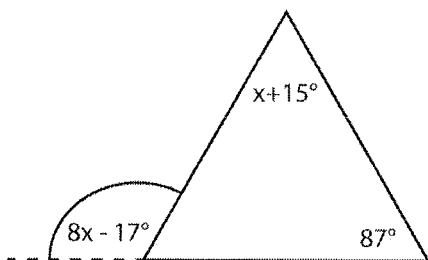
	2	/	3
	○	●	
○	○	○	○
	0	0	0
1	1	1	1
2	●	2	2
3	3	3	●
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7

.	6	6	6
	○	/	
○	○	○	○
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	●	●	●
7	7	7	7

.	6	6	7
	○	/	
○	○	○	○
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	●	●	6
7	7	7	●



16



Using the provided triangle (not drawn to scale), what is the value of  $x$ ?

17

If  $x$  is a real, positive integer and  $x^2 + 8x = 65$ , what is the value of  $x$ ?

18

$$\frac{3-3x}{x-1} = x(x-4)$$

What is the value of  $x$ ?

19

If  $x \neq 0$ , then what is the value of the expression:

$$\frac{\frac{1}{3}(3x)^2}{(4x^4)^{\frac{1}{2}}}$$

20

Function  $g$  is defined by

$g(x) = -3x^3 - 4x^2 + kx - 4$ , where  $k$  is a constant. If the  $x$ -intercepts lie at  $(-2, 0)$ ,  $(p, 0)$ ,  $(q, 0)$ , what is one possible value of  $k$ ?



IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY. DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

# Math Test



Turn to Section 4 of your answer sheet to answer the questions in this section.

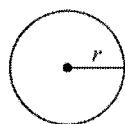
4

55 MINUTES, 38 QUESTIONS

For questions 1-30, solve each problem, choose the best answer from the choices provided, and fill in the corresponding circle on your answer sheet. For questions 31-38, solve the problem and enter your answer in the grid on the answer sheet. Please refer to the directions before question 31 on how to enter your answers in the grid. You may use any available space in your test booklet for scratch work.

**Notes:**

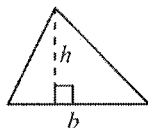
1. The use of a calculator **is permitted**.
2. All variables and expressions used represent real numbers unless otherwise indicated.
3. Figures provided in this test are drawn to scale unless otherwise indicated.
4. All figures lie in a plane unless otherwise indicated.
5. Unless otherwise indicated, the domain of a given function  $f$  is the set of all real numbers  $x$  for which  $f(x)$  is a real number.



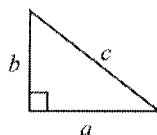
$A = \pi r^2$   
 $C = 2\pi r$



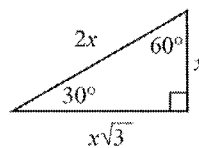
$A = lw$



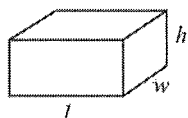
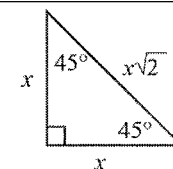
$A = \frac{1}{2}bh$



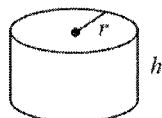
$c^2 = a^2 + b^2$



Special Right Triangles



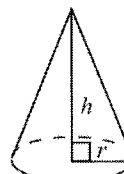
$V = lwh$



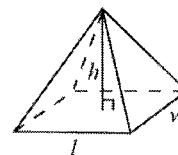
$V = \pi r^2 h$



$V = \frac{4}{3}\pi r^3$



$V = \frac{1}{3}\pi r^2 h$



$V = \frac{1}{3}lwh$

The number of degrees of arc in a circle is 360.

The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE



1

A den of mice had an exact 45% increase in population in the last year. How many total mice could there have been before the increase?

- A) 19
- B) 20
- C) 21
- D) 22

2

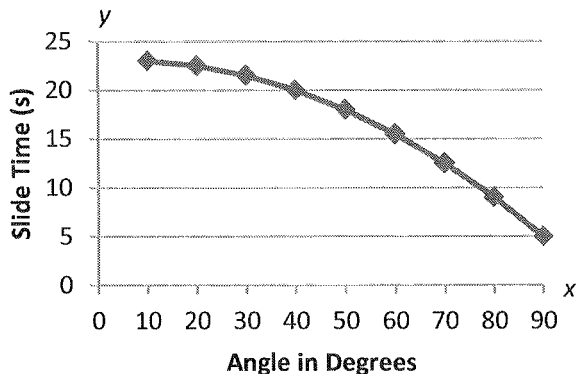
If  $4^x = 32$ , what is the value of  $x^2$ ?

- A) 5
- B) 6.25
- C) 25
- D)  $2\sqrt{2}$

CONTINUE



3



A physics student places a block on a 10 m long ramp covered in sandpaper. She then lifts the ramp up so that it forms an angle,  $\angle C$ , with the ground and then measures how long it takes a smooth block to slide down the ramp. She then calculates the average velocity of the block by taking the distance traveled and dividing by the travel time. Which table below shows the results of her calculations, based on the graph of the data above?

A)

Angle	Velocity
$40^\circ$	.5 m/s
$77^\circ$	1 m/s

B)

Angle	Velocity
$40^\circ$	2 m/s
$77^\circ$	4 m/s

C)

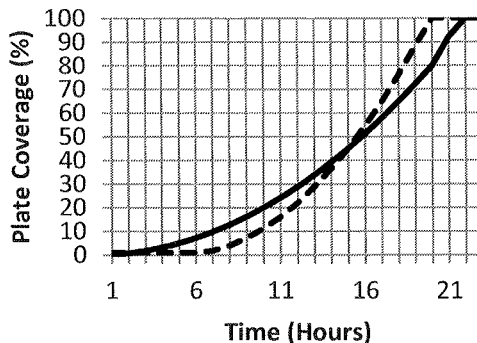
Angle	Velocity
$40^\circ$	1 m/s
$77^\circ$	.5 m/s

D)

Angle	Velocity
$40^\circ$	1 m/s
$77^\circ$	2 m/s

4

Prokaryotic Cells



A biology student places two types of prokaryotes into two separate petri dishes at the same time. He then measures the surface of the petri dish covered by each type of prokaryote and graphs each. Based upon the graphed results, which of the following is true?

- A) Both groups of cells started at 10% coverage.
- B) Neither group could fully colonize a petri dish due to competition.
- C) Both prokaryotes occupied the same amount of their respective dishes at 15 hours.
- D) Both groups of prokaryotes will indefinitely expand at an exponential rate.

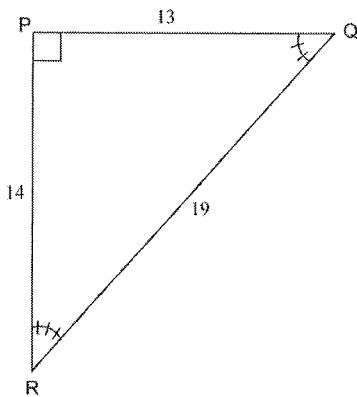
5

If  $3|z - 4| \leq 9$ , what is the greatest possible value for  $z$  ?

- A) 7
- B) 8
- C) 9
- D) 12



6



What is the area of the triangle above?

- A) 91
- B) 133
- C) 182
- D) 266

7

In an election, candidates are allowed to fund raise while campaigning. Candidate A started off with \$1,000,000, and was able to raise funds at a rate of \$20,000 per day. Candidate B started off with \$750,000, and was able to raise \$35,000 per day. Which of the following functions of time in days,  $t$ , models the difference in total funds between the two candidates?

- A)  $f(t) = 1,000,000 + 35,000t$
- B)  $f(t) = 750,000 - 20,000t$
- C)  $f(t) = 250,000 + 15,000t$
- D)  $f(t) = 250,000 - 15,000t$

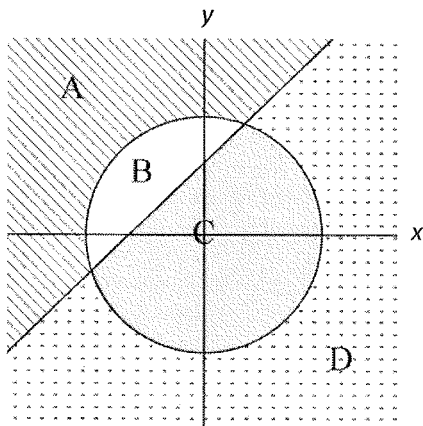
8

If  $p$  is an even integer and  $2p^2 = 2p + 4$ , then which of the following represents the possible value(s) of  $p$ ?

- A)  $p = -1, 2$
- B)  $p = 1$
- C)  $p = 2$
- D)  $p = -2, 1$



9



$$y^2 \leq 4 - x^2$$

$$3y - 2x > x + 3$$

Which of the following areas contains the solutions to both sets of equations?

- A) A and B
- B) B
- C) C
- D) C and D

10

$$2x(3x - 1) = 6x(x + 2) + 7$$

What is the value of  $x$ ?

- A)  $-\frac{10}{7}$
- B)  $-2$
- C)  $-\frac{1}{2}$
- D)  $-\frac{3}{8}$

11

$$\frac{1}{4}x - \frac{1}{6}y = 15$$

$$\frac{1}{17}y + \frac{1}{13}x = -1$$

Which of the following ordered pairs,  $(x, y)$ , satisfies the system of equations above?

- A)  $(26, -51)$
- B)  $(1, -3)$
- C)  $(4, 17)$
- D)  $(-21, 11)$



12

Sugar Saturation in Tea		
Teaspoons of sugar	Dissolved (%)	Un-dissolved teaspoons
0.5	2	0
1	4	0
1.5	6	0
2	8	0
2.5	10	0
3	11	0.25
3.5	11.5	0.5
4	12	1
4.5	12.5	1.5
5	12.5	2

The saturation limit of a liquid is defined as the point at which the solvent (the liquid) no longer dissolves the solute (the solid being dissolved). In the chart above, at how many teaspoons of sugar is the saturation limit reached?

- A) 3
- B) 3.5
- C) 4
- D) 4.5

13

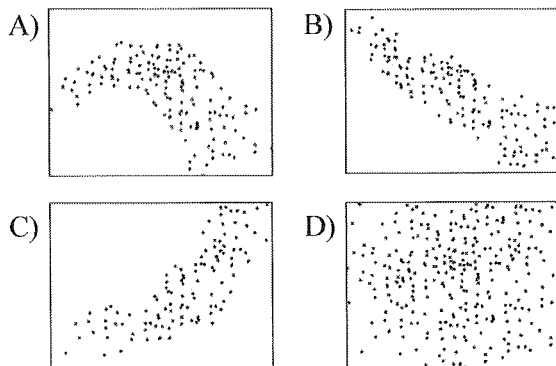
If  $\frac{1}{5}x + \frac{2}{7}y = 2$ , what is the value of the expression  $7x + 10y$ ?

- A) 140
- B) 50
- C) 70
- D) 20

14

Which of the following scatterplot graphs represents data that has a linear, positive correlation?

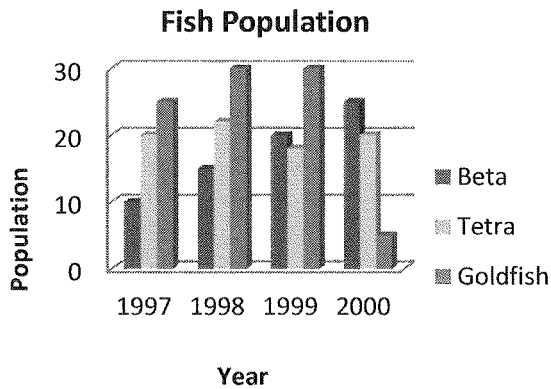
**Note:** A positive correlation between two variables means that as one value increases, the other value increases as well.







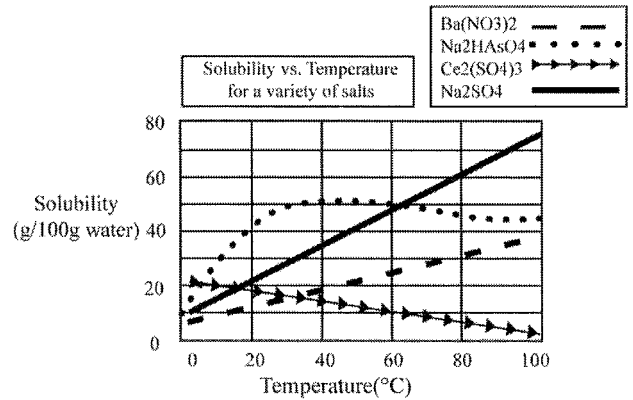
15



A group of scientists studied the population of three fish species in a pond from 1997 to 2000, with their results summed up in the above graph. In which year did a disease devastate the goldfish population?

- A) 1997
- B) 1998
- C) 1999
- D) 2000

16



According to the graph above, which of the salts does not have a linear solubility?

- A)  $Ba(NO_3)_2$
- B)  $Na_2HAsO_4$
- C)  $Ce_2(SO_4)_3$
- D)  $Na_2SO_4$

17

A shipping pallet can hold 223 boxes of cornflakes. If a factory can create two boxes of cereal every minute and the factory runs for 7 hours a day, how many full pallets can the factory produce in a day?

- A) 3
- B) 4
- C) 5
- D) 6



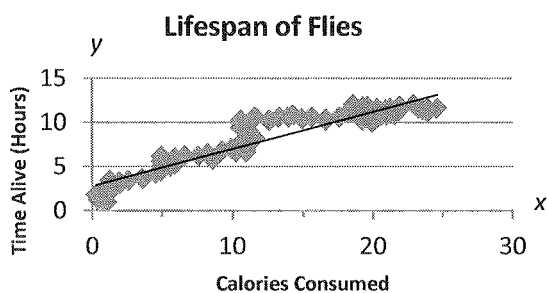
18

$$5(x + 2y) = 3y$$

If the point  $(x, y)$  is a solution to the above equation, and  $y \neq 0$ , what must the ratio  $\frac{x}{y}$  be equal to?

- A)  $-\frac{7}{5}$
- B)  $\frac{1}{5}$
- C) 1
- D)  $\frac{13}{5}$

19



A researcher bred one hundred fruit flies, each of which had identical diets but of varying quantities, in order to see the effects diet has on lifespan. Using the above graph determine the lifespan of a fly that consumed 17 calories.

- A) 5 Hours
- B) 7 Hours
- C) 10 Hours
- D) 14 Hours

20

$$2x^2 - 5x + 2 = 0$$

If  $a$  and  $b$  are solutions to the equation above, which of the following is the value of  $a - b$ ?

- A) 1.5
- B) 2
- C) 2.5
- D) 1

21

If the quadratic equation  $y = ax^2 + bx + c$  has the solution  $(-1, -2)$ , which of the following are possible values for  $a$ ,  $b$ , and  $c$ ?

- A)  $a = -3, b = 1, c = 1$
- B)  $a = -2, b = 0, c = 0$
- C)  $a = 2, b = 1, c = 4$
- D)  $a = 1, b = 0, c = 2$



22

If right triangle  $ABC$  has sides  $b = 7$  and  $c = 24$ , then which of the following is a possible value for the perimeter of triangle  $ABC$  ?

- A) 50
- B) 25
- C) 56
- D) 84

23

A small oil field is able to produce 10 gallons of crude oil per day. At the processing plant nearby it takes 5 gallons of crude oil to produce 3 gallons of gasoline and 1.5 gallons of motor oil. If 225 gallons of motor oil were produced in the last year, how many days was the oil field operational?

- A) 15 days
- B) 225 days
- C) 38 days
- D) 75 days

24

If  $f(x) = 3x - 5$  and  $g(x) = x^2 - 2$ , what is the value of  $g(2)^{f(3)}$  ?

- A) 16
- B) 27
- C) 8
- D) 24



25

$$\frac{1}{x} + \frac{3}{x} = \frac{1}{7}$$

Bob owns a cereal factory that produces cereal. Recently he purchased a new machine that produces cereal at a rate three times greater than his original machine. On an average day Bob has to run both machines for a total of 7 hours in order to meet his customers demand. Which of the following appropriately describes the meaning of the expression  $\frac{3}{x}$  in the equation above?

- A) The amount of time it takes to make one box of cereal
- B) The portion of the job completed by the quicker machine in one hour
- C) The amount of cereal produced by the fast machine in a day
- D) The amount of cereal produced by the slow machine in a day

26

	Mallard			Muscovy		
Year	1992	1997	2002	1992	1997	2002
Population	328	309	274	181	197	218

Every five years, a group of ornithologists studies the populations of various duck species in the wild. Which of the following species had the largest change in population, based on time periods?

- A) Mallard 1992-1997
- B) Mallard 1997-2002
- C) Muscovy 1992-1997
- D) Muscovy 1997-2002

CONTINUE

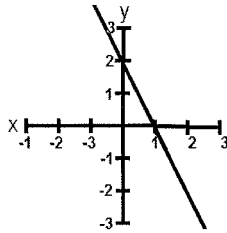


27

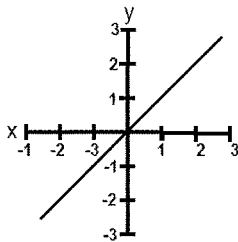
$x - y = c(x + y) - 1$ , where  $c > 1$ ,

Which of the following graphs could describe the above equation?

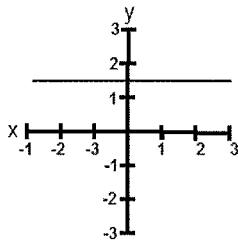
A)



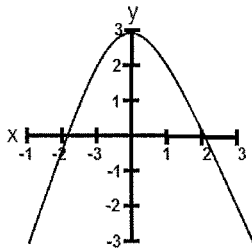
B)



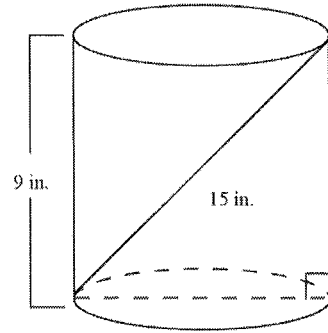
C)



D)



28



What is the volume of the figure above?

- A)  $216 \pi$
- B)  $135 \pi$
- C)  $324 \pi$
- D)  $1,296 \pi$



Questions 29 and 30 refer to the following information.

A marketing firm conducted an online survey among their target demographics about their interest in a new product. The table below contains the results of their survey.

	Would Buy	Would Not Buy	No Response	Total
12-14 Years Old	23,245	8,955	6,432	38,632
14-17 Years Old	18,983	12,244	9,883	41,110
18-24 Years Old	22,245	24,567	19,042	65,854
24+ Years Old	14,245	19,827	23,456	57,528
Total	78,718	65,593	58,813	203,124

29

Which group had the largest percentage of non-respondents?

- A) 12-14 Years Old
- B) 14-17 Years Old
- C) 18-24 Years Old
- D) 24+ Years Old

30

A follow-up survey was emailed to 350 of the 18-24 year olds who said they would not purchase the product. The follow-up survey asked if the price of the product were dropped by 20%, would they change their purchasing decision. Of the 350 emailed, everyone responded, of whom 164 said they would purchase the product if it were 20% cheaper. Based upon this information and the table above, if the product were sold for 20% less how many 18-24 year olds in the respondent demographic would purchase it?

- A) 30,897 people
- B) 27,158 people
- C) 33,756 people
- D) 31,861 people

CONTINUE



Each of the remaining questions requires you to solve the problem and enter your answer by marking the circles in the special grid, as shown in the examples below. You may use any available space for scratch work.

Answer: 201  
Either position is correct

7	/	1	2
	●	7	
○	○	○	○
	0	0	0
1	1	●	1
2	2	2	●
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
●	7	7	7
8	8	8	8
9	9	9	9

← Fraction line

	2	.	5
	○	7	
○	○	○	○
	0	0	0
1	1	1	1
2	●	2	2
3	3	3	3
4	4	4	4
5	5	5	●
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Decimal point

	2	0	1
	○	7	
○	○	○	○
	0	●	0
1	1	1	●
2	●	2	2
3	3	3	3
4	4	4	4

	2	0	1
	○	7	
○	○	○	○
	●	0	0
1	1	●	1
●	2	2	2
3	3	3	3
4	4	4	4

- Mark no more than one circle in any column.
- Because the answer sheet will be machine-scored, you will receive credit only if the circles are filled in correctly.
- Although not required it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- No question has a negative answer.
- Mixed numbers such as  $3 \frac{1}{2}$  must be gridded as 3.5 or 7/2.

(If 

3	1	/	2
○	○	○	○

 is gridded, it will be

interpreted as  $\frac{31}{2}$  not  $3 \frac{1}{2}$ .)

**Decimal Answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid. For example, if you obtain an answer such as 0.6666... you should record your result as .666 or .667. A less accurate value such as .66 or .67 will be scored as incorrect.

Acceptable ways to grid  $\frac{2}{3}$  are:

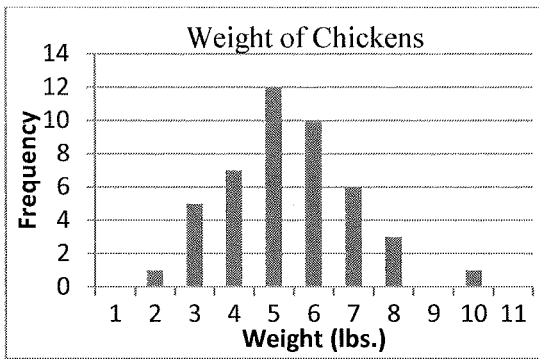
	2	/	3
	○	●	
○	○	○	○
	0	0	0
1	1	1	1
2	●	2	2
3	3	3	●
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7

.	6	6	6
	○	7	
○	○	○	○
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	●	●	●
7	7	7	7

.	6	6	7
	○	7	
○	○	○	○
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	●	●	6
7	7	7	●



31



A statistician purchased several cooked chickens from a store and weighed them. If the graph above summarizes the results of his purchase, what is the median weight?

32

If  $x + 2$  is a factor of the expression  $x^2 + cx + c$ , where  $c$  is a constant, what is the value of  $c$ ?

33

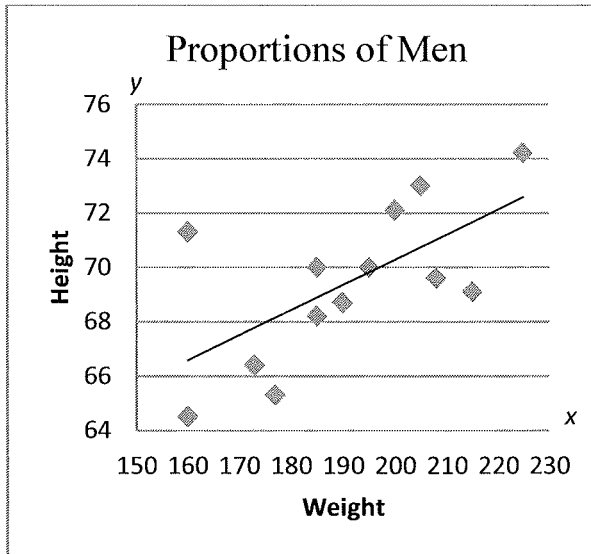
A small rocket fuel processing plant was built in order to provide the fuel for a special asteroid mining mission. The plant can produce 15 gallons of fuel per hour, and has 75 days until the mission. If the mission will require 7,875 gallons of rocket fuel, how many hours a day will the plant need to be open in order for the mission to launch?

CONTINUE





34



For a clinical trial 14 men were weighed in pounds and measured in inches. What is the weight, in pounds, of the man who is furthest from the trend line?

35

If  $\frac{48}{x+1} - \frac{24}{x-1} = 2$ , what is one possible value of  $x$ ?

36

$$\frac{1}{8}x - \frac{1}{6}y = 17$$

$$3x - py = 34$$

If the above system of equations has no solution and if  $p$  is a constant, what is the value of  $p$ ?



---

**Questions 37 and 38 refer to the following information.**

Tom and Luke are going to open a new bank account. Tom has \$500 and opens an account with a bank that has an annual simple interest rate of 5%. Luke has \$750 and opens an account with a bank that has a semiannual compound interest rate of 4%.

**37**

In 4 years, what is the amount of money in Tom's account? Round to the nearest whole dollar.

**38**

In 1 year, what is the amount of money in Luke's account? Round to the nearest whole dollar.

---



IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY. DO NOT TURN TO ANY OTHER SECTION IN THE TEST.

## SAT Practice Essay

5

**Directions:** The essay portion of this test allows you to demonstrate how well you can read, comprehend, and analyze a passage. In your essay, you should show that you have read the passage carefully, present a coherent analysis, and use language accurately.

### Important Reminders:

- You have 50 minutes to write your essay.
- A pencil is required for the essay. An essay written in ink will receive a score of zero.
- Do not write your essay in your test book. You will receive credit only for what you write on your answer sheet.

### As you read the passage below, consider how L. Gordon Crovitz uses

- evidence, such as facts and examples, to support claims.
- reasoning to develop ideas and to connect claims and evidence.
- stylistic or persuasive elements, such as word choice or appeals to emotion, to add power to the ideas expressed.

*Adapted from L. Gordon Crovitz, "America's Internet Surrender." © 2015 by Dow Jones and Company, Inc. Originally published March 18, 2014.*

- 1 The Internet is often described as a miracle of self-regulation, which is almost true. The exception is that the United States government has had ultimate control from the beginning; Washington, however, has not abused its supervisory role. Instead, it has used its oversight only to ensure that the Internet runs efficiently and openly, without political pressure from any country.
- 2 This was the happy state of affairs until the Obama administration made the surprise announcement that it will relinquish its oversight of the Internet Corporation for Assigned Names and Numbers, or Icaann, which assigns and maintains domain names and Web addresses for the Internet. Now, Russia, China and other authoritarian governments, which have already been working to redesign the Internet more to their liking, will no doubt leap to fill the power vacuum caused by America's unilateral retreat.
- 3 According to the administration's announcement, the Commerce Department will not renew its agreement with Icaann, which dates to 1998. This means, effective next year, the U.S. will no longer oversee the "root zone file," which contains all names and addresses for websites world-wide. If authoritarian regimes in Russia, China and elsewhere get their way, domains could be banned and new ones not approved for meddlesome groups such as Ukrainian-independence organizations or Tibetan human-rights activists.
- 4 Until the U.S.'s decision to relinquish its governance of Icaann, other countries knew that Washington would use its control over Icaann to block any such censorship. The U.S. has protected engineers and other nongovernment stakeholders so that they can operate an open Internet, meaning that authoritarian regimes from Moscow to Damascus seeking to cut off their own citizens' Internet access have been unable to undermine general access to the Internet, where no one needs any government's permission to launch a website. The Obama administration has now endangered that hallmark of Internet freedom.
- 5 The U.S. role in protecting the open Internet is similar to its role enforcing freedom of the seas. The U.S. has used its power over the Internet exclusively to protect the interconnected networks from being closed off, just as the U.S. Navy protects sea lanes. Imagine the alarm if America suddenly announced that it would no longer patrol the world's oceans.

CONTINUE

- 
- 6 In the past few years, Russia and China have used a U.N. agency called the International Telecommunication Union (ITU) to challenge the open Internet. They have lobbied for the ITU to replace Washington as the Icann overseer. They want the ITU to outlaw anonymity on the Web (to make identifying dissidents easier) and to add a fee charged to providers when people gain access to the Web “internationally”—in effect, a tax on U.S.-based sites such as Google and Facebook. The unspoken aim is to discourage global Internet companies from giving everyone equal access.
- 7 At an ITU conference in 2012 stage-managed by authoritarian governments, former Obama aide Andrew McLaughlin proposed abolishing the ITU, calling it “the chosen vehicle for regimes for whom the free and open Internet is seen as an existential threat.” Congress unanimously opposed any U.N. control over the Internet.
- 8 Google organized an online campaign against the ITU, getting three million people to sign a petition saying that “a free and open world depends on a free and open web.”
- 9 Such efforts came too late: By a vote of 89-55, countries in the ITU approved a new treaty granting authority to governments to close off their citizens’ access to the global Internet. This treaty, which goes into effect next year, legitimizes censorship of the Web and the blocking of social media. In effect, a digital Iron Curtain will be imposed, dividing the 425,000 global routes of the Internet into less technically resilient pieces.
- 10 The ITU is now a lead candidate to replace the U.S. in overseeing Icann. The Commerce Department says it doesn’t want to transfer responsibility to the ITU or other governments, but has suggested no alternative. Esther Dyson, founding chairwoman of Icann (1998-2000), calls U.N. oversight a “fate worse than death” for the Internet.
- 11 The alternative to control over the Internet by the U.S. is *not the elimination of any government involvement*. It is, rather, the involvement of many other governments, some authoritarian, at the *expense* of the U.S. Unless the White House plan is reversed, Washington will hand the future of the Web to the majority of countries in the world already on record hoping to close the open Internet.
- 

Write an essay in which you explain how L. Gordon Crovitz builds an argument to persuade his audience that the Obama administration should not relinquish the U.S. government’s control over Icann. In your essay, analyze how Crovitz uses one or more of the features listed in the box above (or features of your own choice) to strengthen the logic and persuasiveness of his argument. Be sure that your analysis focuses on the most relevant features of the passage.

Your essay should not explain whether you agree with Crovitz’s claims, but rather explain how Crovitz builds an argument to persuade his audience.



IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY. DO NOT TURN TO ANY OTHER SECTION IN THE TEST.