

GMAT Prep

Percent and Ratios



Percent and Ratios

1. On July 1, the ratio of men to women in Club X was 9 to 20. During the month, 2 additional men and 2 additional women joined the Club and no members dropped out. The ratio of men to women in Club X at the end of July is?
- A. 11:2
 - B. 1:2
 - C. 1:3
 - D. 11:20
 - E. Cannot be determined



Percent and Ratios

2. If a small juice can contain 200 millilitres, how many litres of juice are there in a case containing 48 small cans? (1 litre = 1000 millilitre)
- A. 0.96
 - B. 9.6
 - C. 96
 - D. 960
 - E. 9,600



Percent and Ratios

3. If $a:b = 2:5$, what is the ratio of $(3a+4b)$ and $(4a+5b)$?

A. $\frac{1}{5}$

B. $\frac{2}{5}$

C. $\frac{26}{33}$

D. $\frac{7}{9}$

E. $\frac{9}{10}$



Percent and Ratios

4. In a mixture of 28 litres, the ratio of milk and water is 5:2. If 2 litres of water is added to the mixture, what is the ratio of milk and water in the new mixture?
- A. 5:2
 - B. 3:5
 - C. 2:1
 - D. 1:2
 - E. 3:4



Percent and Ratios

5. A sum of \$7,000 is divided among A, B, and C in such a way that shares of A and B are in the ratio 2:3 and those of B and C are in the ratio 4:5. What amount does C receive?
- A. \$200
 - B. \$1,000
 - C. \$1,500
 - D. \$3,000
 - E. \$3,500



Percent and Ratios

6. At College X, the faculty-to-student ratio is 1:9. If two-thirds of the students are female and one-quarter of the faculty is female, what fraction of the combined students and faculty is female?

A. $\frac{1}{5}$

B. $\frac{3}{5}$

C. $\frac{5}{8}$

D. $\frac{3}{4}$

E. $\frac{9}{10}$



Percent and Ratios

7. There was a series of two successive discounts of $x\%$ on the price of a shirt. The final price of the shirt was tagged at 64% of the original price. What is the value of x ?
- A. 10%
 - B. 20%
 - C. 22%
 - D. 28%
 - E. 32%



Percent and Ratios

8. If the length and the width of a rectangular garden plot were each increased by 20 percent, what would be the percent increase in the area of the plot?
- A. 20%
 - B. 24%
 - C. 36%
 - D. 40%
 - E. 44%



Percent and Ratios

9. During a certain season, a team won 80 percent of its first 100 games and 50 percent of its remaining games. If the team won 70 percent of its games for the entire season, what was the total number of games it played?
- A. 180
 - B. 170
 - C. 156
 - D. 150
 - E. 105



Percent and Ratios

10. During a two-week period, the price of an ounce of silver increased by 25 percent by the end of the first week and then decreased by 20 percent of this new price by the end of the second week. If the price of silver was x dollars per ounce at the beginning of the two-week period, what was the price, in dollars per ounce, by the end of the period?

- A. $0.8x$
- B. $0.95x$
- C. x
- D. $1.05x$
- E. $1.25x$



Percent and Ratios

11. Approximately what percentage of the world's forested area is represented by Finland given that Finland has 53.42 million hectares of forested land of the world's 8.076 billion hectares of forested land.
- A. 0.0066%
 - B. 0.066%
 - C. 0.66%
 - D. 6.6%
 - E. 66%



Percent and Ratios

12. A 200-gram solution is 75% salt. How much pure water must be added to produce a solution that is 60% salt?
- A. 20 grams
 - B. 25 grams
 - C. 40 grams
 - D. 50 grams
 - E. 100 grams



Percent and Ratios

13. A rabbit on a controlled diet is fed daily 300 grams of a mixture of two foods, food X and food Y. Food X contains 10 percent protein and food Y contains 15 percent protein. If the rabbit's diet provides exactly 38 grams of protein daily, how many grams of food X are in the mixture?
- A. 100
 - B. 140
 - C. 150
 - D. 160
 - E. 200



Percent and Ratios

14. Cone V_2 is obtained by increasing the radius of cone V_1 by 20% and decreasing the height by 20%. Volume V_2 is what percent of Volume V_1 ?

(Note: Volume of the cone = $\frac{1}{3} \pi r^2 h$)

- A. 9.6%
- B. 15.2%
- C. 144%
- D. 96%
- E. 115.2%



Percent and Ratios

15. Cathy earns \$500 per week and saves 30% of her earnings while spending the rest. David saves 20% less than Cathy and spends 10% more than what Cathy spends. What is David's earning (in \$) per week?
- A. \$495
 - B. \$500
 - C. \$505
 - D. \$515
 - E. \$510



Percent and Ratios

16. Karen bought a smartphone for x dollars, which included a 9% sales tax on the discounted price. If the discounted price was 15% less than the regular price, then what is the regular price of the smartphone?

A. $\frac{x}{(1.09)(0.85)}$

B. $\frac{1.09x}{0.85}$

C. $\frac{x}{(1.19)(0.85)}$

D. $\frac{0.85x}{1.09}$

E. $(1.09)(0.85)x$



Percent and Ratios

17. A drink holding 6 ounces of an alcoholic drink that is 1 part rum to 2 parts coke is added to a jug holding 32 ounces of an alcoholic drink that is 1 part rum to 3 parts coke. What is the ratio of rum to coke in the resulting mixture?
- A. 2:5
 - B. 5:14
 - C. 3:5
 - D. 4:7
 - E. 14:5



Percent and Ratios

18. An inflationary increase of 20 percent on an order of raw materials followed by an inflationary increase of 10 percent amounts to
- A. the same as one 22 percent inflationary increase
 - B. the same as one 30 percent inflationary increase
 - C. the same as an inflationary increase of 10 percent followed by an inflationary increase of 20 percent
 - D. less than an inflationary increase of 10 percent followed by an inflationary increase of 20 percent
 - E. more than an inflationary increase of 10 percent followed by an inflationary increase of 20 percent



Percent and Ratios

19. John wants to buy a laptop and has a budget of \$1,200. He finds a laptop that is being sold at a 25% discount on the marked price. What is the maximum possible marked price of the laptop in dollars that John can afford?
- A. \$960
 - B. \$1,350
 - C. \$1,500
 - D. \$1,600
 - E. \$1,650



Percent and Ratios

20. $\frac{3x}{7} = \frac{5ab^3}{c^2}$, where a , b , and c are positive constant. What is the percent increase in the values of x if a is doubled and c is halved?

- A. 7%
- B. 8%
- C. 300%
- D. 700%
- E. 800%





Thank you