

UCAT

Quantitative Reasoning 4



World News(Q1 to Q7)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
Year 3	135,000	110,000	190,000
Year 4	136,000	156,000	167,000
Year 5	133,000	176,000	156,000

Newspaper A:

- Sold in New Zealand, Australia and West Africa.
- Price is 70p in all years.

Newspaper B:

- Sold only in Europe.
- Years 1, 2 and 3: Price is 65p.
- Years 4 and 5: Price is 60p.

Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.



Q1)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
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Newspaper B:

- Sold only in Europe.
- Years 1, 2 and 3: Price is 65p.
- Years 4 and 5: Price is 60p.

Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

In Year 1, what proportion of the total number of newspapers sold that year did Newspapers A and C represent?

- a. 59% b. 63% c. 68% d. 76% e. 79%



Q2)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
Year 3	135,000	110,000	190,000
Year 4	136,000	156,000	167,000
Year 5	133,000	176,000	156,000

Newspaper A:

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- Sold only in Europe.
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Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

What was the income for Newspaper C in Year 5?

a. £86,166 b. £86,245 c. £87,135 d. £87,576 e. £87,828



Q3)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
Year 3	135,000	110,000	190,000
Year 4	136,000	156,000	167,000
Year 5	133,000	176,000	156,000

Newspaper A:

- Sold in New Zealand, Australia and West Africa.
- Price is 70p in all years.

Newspaper B:

- Sold only in Europe.
- Years 1, 2 and 3: Price is 65p.
- Years 4 and 5: Price is 60p.

Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

What was the total income for Europe in Year 4?

a. £91,585 b. £110,165 c. £111,350 d. £124,495 e. 134,460



Q4)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
Year 3	135,000	110,000	190,000
Year 4	136,000	156,000	167,000
Year 5	133,000	176,000	156,000

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- Years 1, 2 and 3: Price is 65p.
- Years 4 and 5: Price is 60p.

Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

Between Year 5 & Year 6, the number of newspapers sold changed as follows:

- Newspaper A: sales dropped by 50%
- Newspaper B: sales increased by 133%
- Newspaper C: sales increased by $\frac{5}{9}$ ths.

How many newspapers were sold in Year 6 (nearest thousand)?

a. 231,000 b. 384,000 c. 543,000 d. 719,000 e. 923,000



Q5)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
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Newspaper C:

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- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

In Year 3, the cost of printing Newspaper B was 30p per copy. The cost of printing increases by 10% every year. In what year will the cost of printing become greater than the income generated by the sales of Newspaper B, assuming that the retail price of Newspaper B remains at Year 5 level?

- a. Year 8 b. Year 9 c. Year 10 d. Year 11 e. Year 12



Q6)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
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Newspaper A:

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- Years 1, 2 and 3: Price is 65p.
- Years 4 and 5: Price is 60p.

Newspaper C:

- 37% of copies sold in Europe. 63% of copies sold in Asia.
- Years 1, 2 and 3: Price is 55p in all regions.
- Years 4 and 5: Price is 50p in Europe and 60p in Asia.

What proportion of all newspaper copies were sold in Europe in Year 3?

- a. 16.2% b. 25.3% c. 35.3% d. 41.4% e. 47.4%



Q7)

Number of newspapers sold over Years 1 to 5

	Newspaper A	Newspaper B	Newspaper C
Year 1	130,000	110,000	98,700
Year 2	230,000	140,000	100,000
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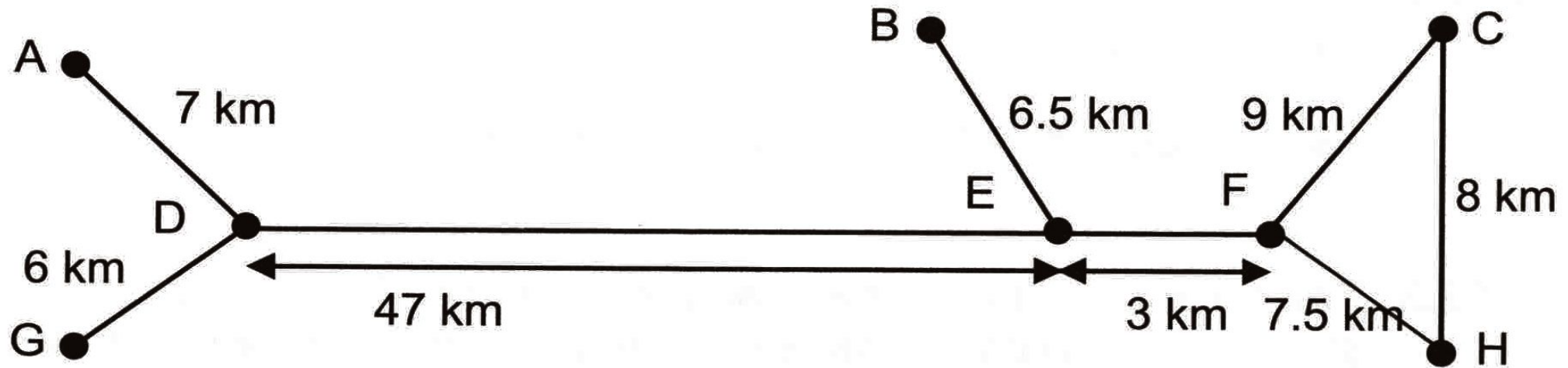
What was the average yearly income for Newspaper C over the five years (to the nearest pound)?

a. £ 66,842 b. £ 79,127 c. £ 142,340 d. £ 253,256 e. £ 376,199



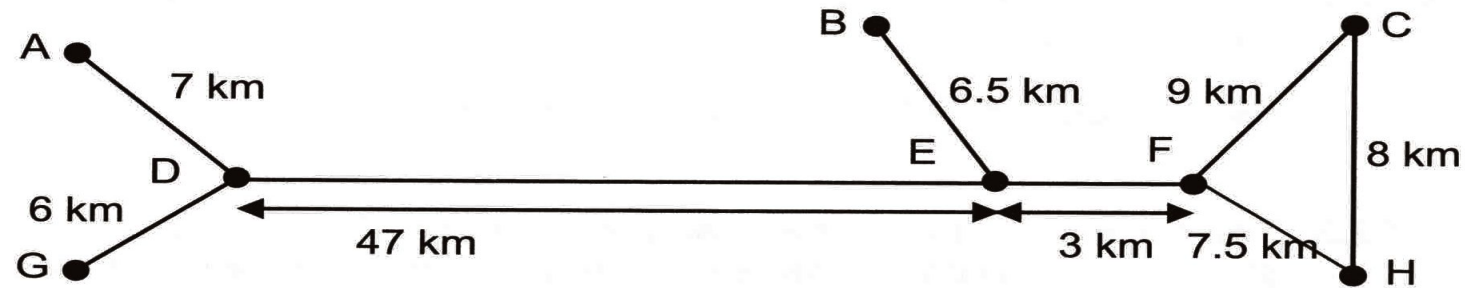
Going For a Ride(Q8 to Q14)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.



Q8)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.

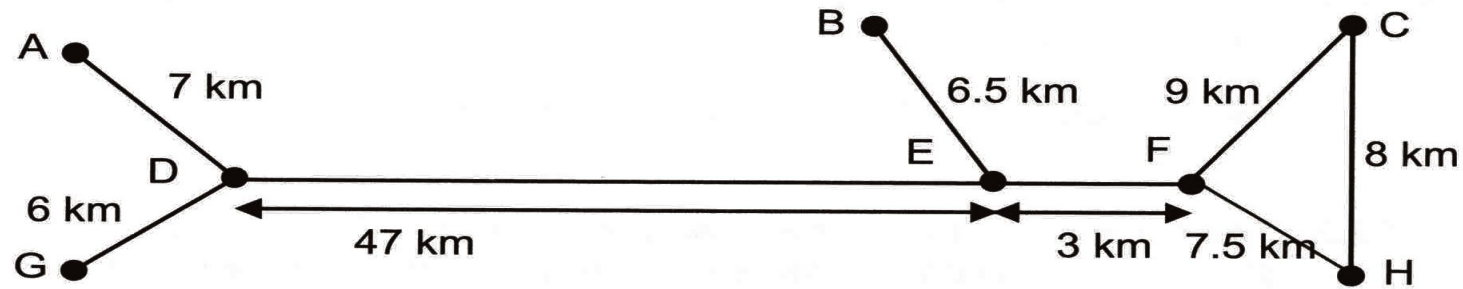


It takes 20 minutes for a car to travel from Town E to Town C using the shortest route. How long will the car take to travel from town E to town H using the most direct route, assuming that it goes at the same average speed?

- | | | |
|--------------|--------------|--------------|
| a. 17min 30s | b. 17min 40s | c. 17min 50s |
| d. 18min 10s | e. 18min 20s | |

Q9)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.

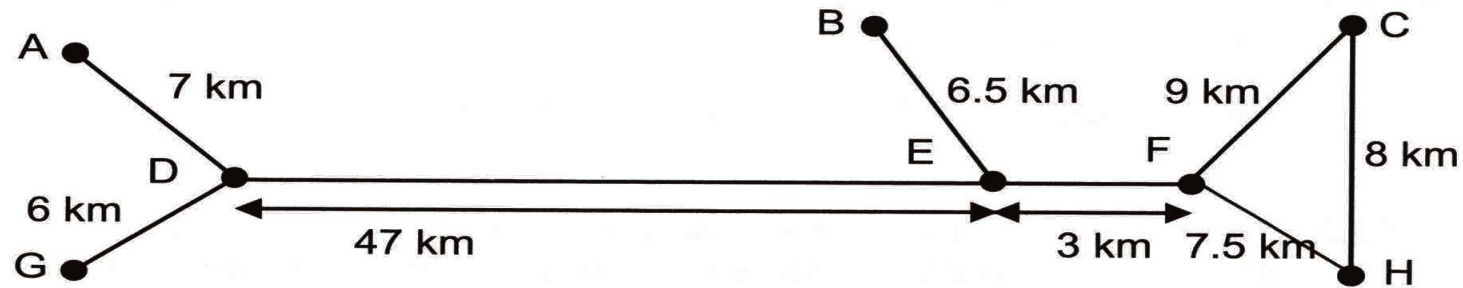


A cyclist can ride along the following route: D-E-F-C-H-F-E-B in 10 hours and 30 minutes. What is his average speed?

- a. 7.1 km/h b. 7.6 km/h c. 8.0 km/h d. 8.2 km/h e. 8.4 km/h

Q10)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.

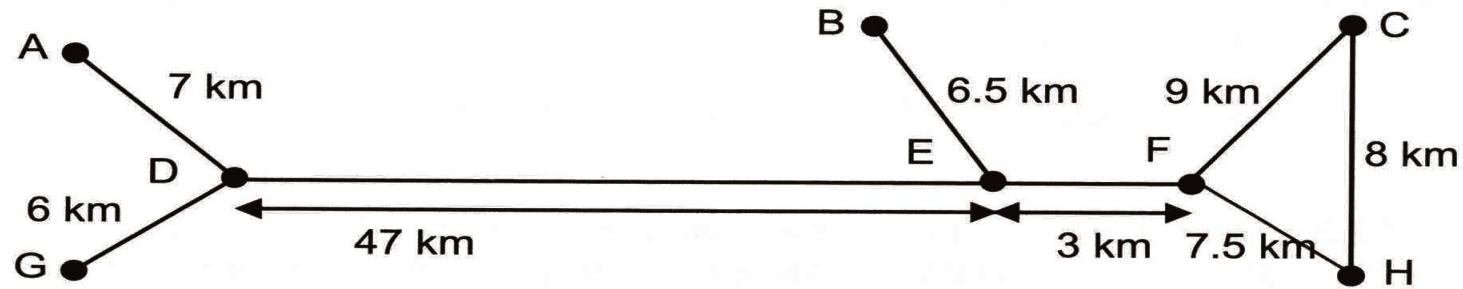


Mr Smith works in Town G. He has 2 hours and 25 minutes free. He decides to go for a ride in his car. He calculates that he has just enough time to go to a certain town, stay there for 49 minutes and get back to work. Which town does he intend to visit, assuming that he drives at an average speed of 70 km/h.

- a. Town B b. Town C c. Town E d. Town F e. Town H

Q11)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.

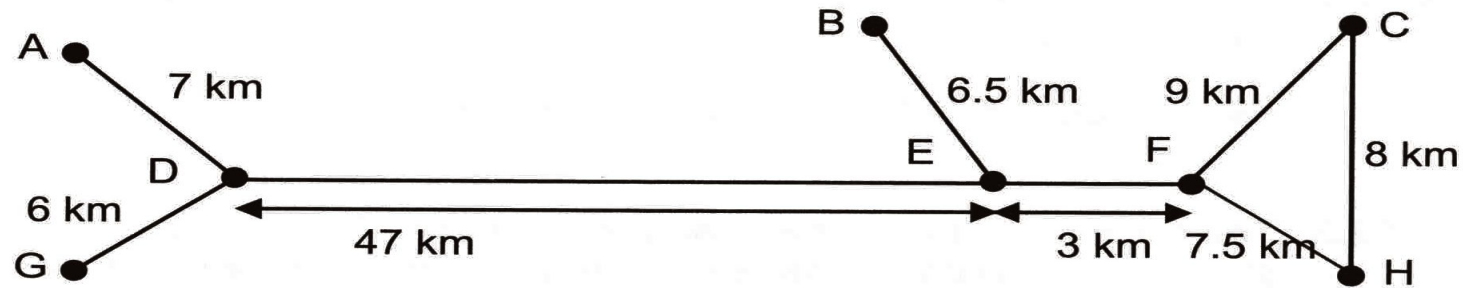


A cyclist starts riding from Town C at an average speed of 18 km/h and arrives at his destination 40 minutes later. What is his destination?

- a. Town B b. Town D c. Town E d. Town F e. Town H

Q12)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.

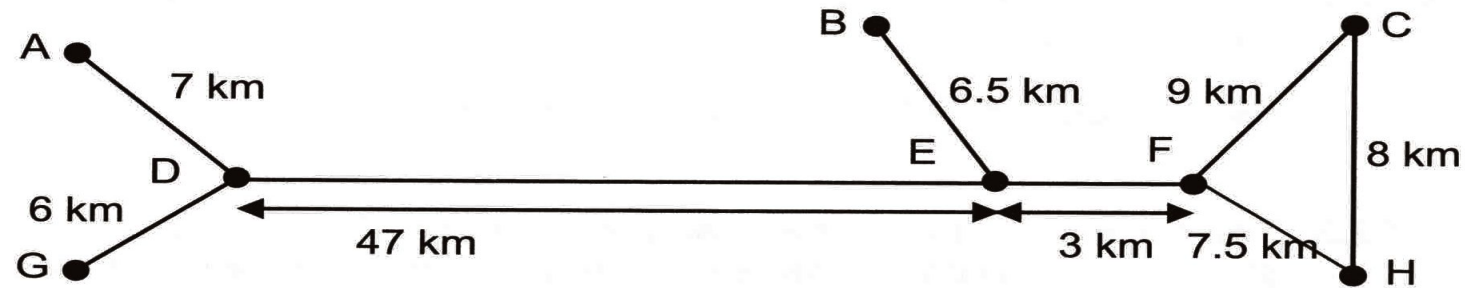


A cyclist rides from Town D to Town H along the road D-E-F-H. He calculates that if he could ride at a certain average speed, he would arrive into Town H 15 minutes earlier than if he was travelling at 18.4 km/h. What is that speed?

- a. 5 km/h b. 10 km/h c. 15 km/h d. 20 km/h e. 25 km/h

Q13)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.



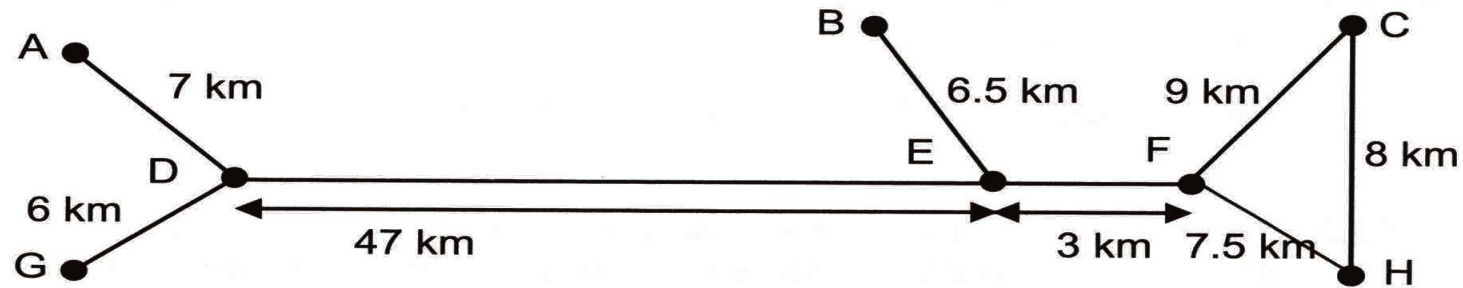
As well as a road network, the towns are linked by a tube network which runs exactly underneath the roads. The tube stations are where the dots are shown on the map.

Two passengers leave Town C at the same time to go to Town G, using the route C-F-E-D-G. One passenger travels by tube (no changes necessary) and the other one by car. Between stations, the tube drives at 30 km/h, stopping at each intermediary station for exactly 1 minute. On the road, the car driver drives at 94 km/h between D and E, and at 72 km/h on all other roads. How much later than the car driver will the tube passenger arrive in Town G?

- a. 45 min b. 59 min c. 1h 28min d. 1h 47min e. 2h 13min

Q14)

The following graph shows distances between 8 towns named A to H. Travel between towns is always done using the shortest route.



The local authorities have organised a bus services as follows:

- Line FCH: the bus goes in a loop from Town F to Town C to Town H to Town F and so on at 49 km/h (including stops).
- The bus starts at 5am from Point F and stops running at 11pm.

During a one-day shift, how many times will the bus have driven through Town C?

- a. 12 times b. 18 times c. 36 times d. 48 times e. 54 times



Hot Chocolate(Q15 to Q20)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk con- tains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

Q15)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk con- tains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

How much fat is contained in 200 ml of whole milk (to the nearest 0.1 g)?

- a. 1.2 g b. 3.4 g c. 6.8 g d. 8.1 g e. 9.6 g



Q16)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk contains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

The customer finds whole milk a bit rich and decides to use a mix of semi-skimmed milk and water instead. He then adds 200 ml of the mixed liquid to 18 g of powdered chocolate. The total fat content of the resulting drink is 2.464 g. Given that water does not contain any fat, what volume of semi-skimmed milk did he use?

- a. 56.0 ml b. 81.5 ml c. 144.9 ml d. 118.5 ml e. 170.4 ml



Q17)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk con- tains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

The customer uses up the whole box of powdered chocolate, making hot drinks according to the instructions. How many pints of milk will he have used (1 pint = 570 ml)?

a. 0.35

b. 4.4

c. 7.0

d. 14.1

e. 20.0



Q18)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk contains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

The customer is on a diet and, in an effort to reduce his weight, he decides to limit the total daily calories that he gets from the chocolate drink to a strict maximum of 800 kCal. To achieve his objective, he decides to make three chocolate drinks per day using water only (water does not contain any calories) and to make any other chocolate drink using his usual whole milk.

What is the maximum number of whole-milk-based chocolate drinks that he can have in addition to his three daily water-based drinks in order not to breach his resolution?

- a. 0 drink b. 1 drink c. 2 drinks d. 3 drinks e. 4 drinks



Q19)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk con- tains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

The customer buys semi-skimmed milk with a label that states that its protein content is 3.3 g per 100 ml. What is the total amount of protein that he will have drunk once he has made drinks with the entire box of chocolate using standard proportions and semi-skimmed milk instead of whole milk (to the nearest gram)?

- a. 66 g b. 160 g c. 164 g d. 244 g e. 272 g



Q20)

A chocolate lover purchases a 360 g box of powdered drinking chocolate. The label states the following:

NUTRITIONAL INFORMATION			INSTRUCTIONS
	Per 100 g (dry powder)	Per 18 g serving (with 200 ml whole milk)	Put 3 heaped teaspoons (18 g) into a mug. Add 200 ml of hot milk and stir well. Sit back and relax! For a diet drink, you can use semi-skimmed or skimmed milk. Semi-skimmed milk contains 1.7 g of fat per 100 ml. Skimmed milk contains 0.3 g of fat per 100 ml.
Energy (kJ)	1555	845	
kCal	372	200	
Protein (g)	8.9	8.0	
Carbohydrate (g)	65.2	20.4	
Fat (g)	8.4	9.6	

The calorific value of food is measured in kCal and is calculated by adding the calorific values of protein, carbohydrate and fat. The calorific value of 1 g of protein is 4 kCal and the calorific value of 1 g of carbohydrate is 4 kCal.

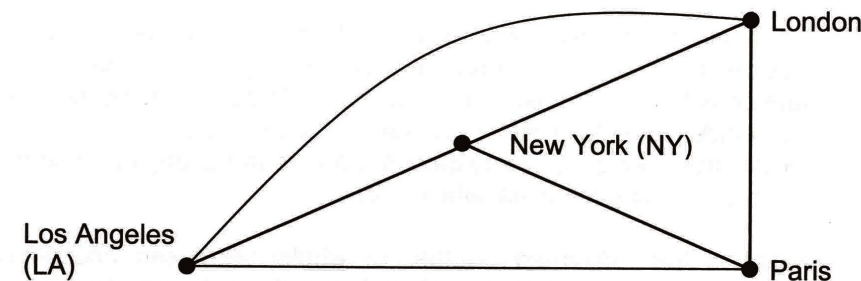
What is the calorific value of 1 g of fat, to the nearest gram?

- a. 4 kCal b. 6 kCal c. 9 kCal d. 21 kCal e. 44 kCal



Time Traveller(Q21 to Q26)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
Arrives:	14:50	16:55	17:40	21:55	23:30	21:20

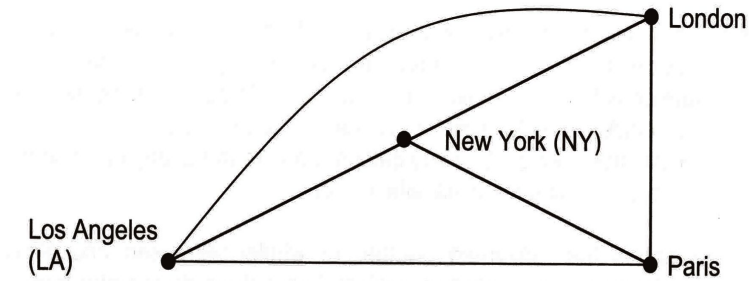
In addition, the traveller is aware that when it is 12 noon in London, the time in:

- Paris is 1pm
- New York is 7am
- Los Angeles 4am



Q21)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
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In addition, the traveller is aware that when it is 12 noon in London, the time in:

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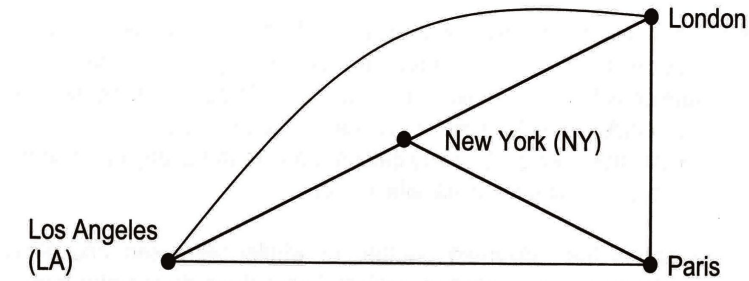
What is the duration of a flight from NY to LA?

- a. 20min b. 2h 20min c. 3h 30min d. 5h 20min e. 6h 20min



Q22)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
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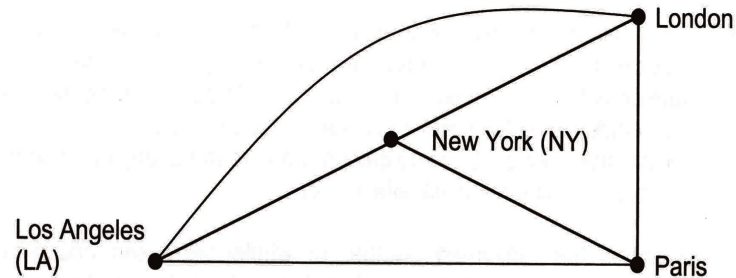
A client wants to travel along the route London → Paris → Los Angeles. He takes the first plane of the day from London and then transfers to the next plane available whenever he reaches a new destination. How much time will have elapsed between his departure from London and his arrival in Los Angeles?

- a. 5h35min b. 12h35min c. 13h35min d. 14h35min e. 15h35min



Q23)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



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	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
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Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
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- Los Angeles 4am

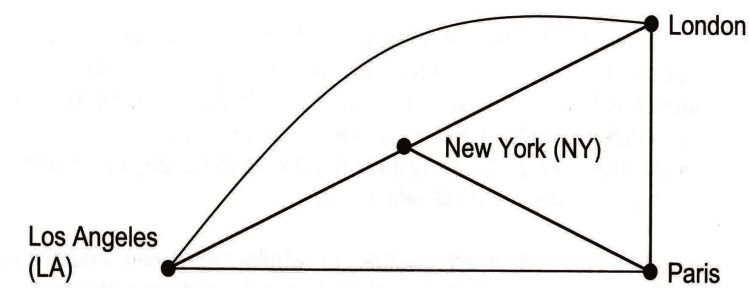
The plane from Paris to New York flies at an average speed of 730 km/h. What is the distance between the two airports?

a. 1,460km b. 2,920km c. 4,380km d. 5,840km e. 7,300km



Q24)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
Arrives:	14:50	16:55	17:40	21:55	23:30	21:20

In addition, the traveller is aware that when it is 12 noon in London, the time in:

- Paris is 1pm
- New York is 7am
- Los Angeles 4am

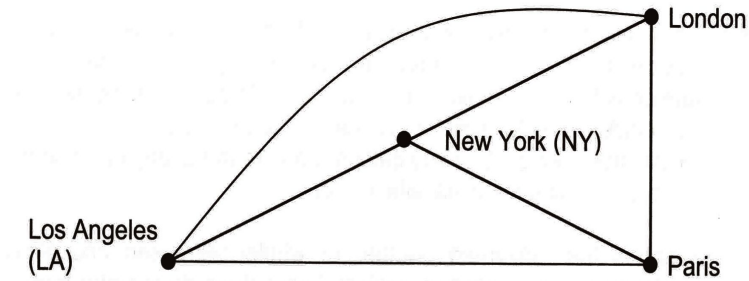
Jack and John want to travel from London to Los Angeles. Jack decides to fly via Paris, whilst John decides to fly via New York. It is 9am and they decide to take the first plane available to them. On arrival at their intermediate destination (Paris or New York), they jump on the first available plane to Los Angeles. When they meet up in Los Angeles, they compare the time it took them to travel from the moment their first plane left to the time their second plane arrived. What is the difference between their respective times?

- a. 1h 55min b. 2h 35min c. 2h 45min d. 3h 35min e. 4h 15min



Q25)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
Arrives:	14:50	16:55	17:40	21:55	23:30	21:20

In addition, the traveller is aware that when it is 12 noon in London, the time in:

- Paris is 1pm
- New York is 7am
- Los Angeles 4am

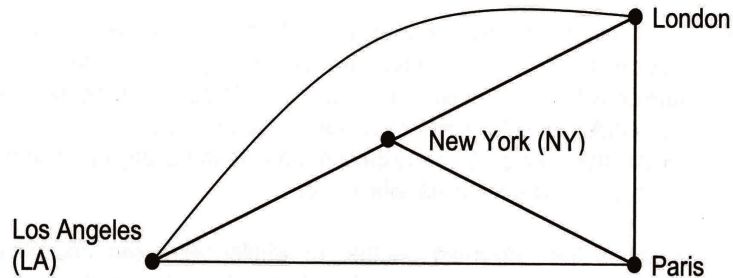
The airline wants to introduce a new flight from Paris to New York such that the flight should arrive in New York 30 minutes before the last flight from New York to Los Angeles departs. At what time should this new flight leave Paris (expressed in local Paris time)?

- a. 11:40 b. 13:40 c. 15:40 d. 17:40 e. 19:40



Q26)

A traveller is looking at a variety of options to travel. All possible connections are shown on the diagram below and can be made by plane.



The timetables for the various flights are as follows (all times expressed in local times):

	London to Paris	London to NY	Paris to NY	Paris to LA	NY to LA	London to LA
Departs:	7:50	7:25	6:15	11:15	11:30	10:15
Arrives:	10:15	10:25	8:15	13:25	14:50	13:20
Departs:	9:25	9:10	8:55	13:00	15:50	12:00
Arrives:	11:50	12:10	10:55	15:10	19:10	15:05
Departs:	10:30	11:45	13:20	16:10	17:20	15:10
Arrives:	12:55	14:45	15:20	18:20	20:40	18:15
Departs:	12:25	13:55	15:40	19:45	20:10	18:15
Arrives:	14:50	16:55	17:40	21:55	23:30	21:20

In addition, the traveller is aware that when it is 12 noon in London, the time in:

- Paris is 1pm
- New York is 7am
- Los Angeles 4am

A plane travels on average at 730 km/h and consumes on average 2.1 litres of fuel per kilometre flown. How much fuel does the airline use in 1 day for the Paris to Los Angeles flights?

- a. 3,321 b. 13,286 c. 17,119 d. 68,474 e. 75,486



Conferencing & Banqueting(Q27 to Q31)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
NOTE Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.



Q27)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
<u>NOTE</u> Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.

What is the cost for 7 participants on a DDR contract on a Monday?

- a. £315 b. £350 c. £360 d. £400 e. £450



Q28)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
<u>NOTE</u> Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.

How much would it cost on the RB contract to replicate the package of services provided under the DDR package for 10 participants on a Sunday?

- a. £450 b. £500 c. £650 d. £799 e. £817



Q29)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
<u>NOTE</u> Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.

The company needs the following for a Saturday conference:

- Room
- Flipchart
- 3 servings of tea and coffee
- Sit-down lunch

They are hesitating between the RB rate and the DDR rate (they don't mind getting more than they require if the price is cheaper). For which number of participants would the total DDR cost be greater than the RB cost?

- a. 10 b. 13 c. 14 d. 15 e. 16



Q30)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
<u>NOTE</u> Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.

All costs quoted include VAT at 17.5%. The government decides to reduce the VAT rate to 15% for the foreseeable future and the hotel wishes to alter its rates accordingly. What is the new week-end DDR rate after allowance has been made for the new 15% VAT rate?

- a. £38.30 b. £39.13 c. £44.04 d. £45.98 e. £46.74



Q31)

A company specialising in organising conferences has a choice between two different types of contract at one venue.

- A **Daily Delegate Rate (DDR)** contract, whereby they pay a fixed price per delegate which entitles them to a comprehensive range of services (e.g. use of the room, flipchart, water, tea and coffee, lunch, etc.).
- A **Room-Basis (RB)** contract, whereby each service used is charged individually.

The company has collected a brochure from a potential conference venue, which provides the following tariff information:

The Red Rag Conference Centre	
DDR contract	RB contract
£45 per participant (weekend) £50 per participant (weekdays)	<u>Room hire:</u> <ul style="list-style-type: none">▪ £250 (weekend)▪ £350 (weekdays)
<u>Includes:</u> <ul style="list-style-type: none">▪ Use of conference room▪ Projector▪ Flipchart▪ 3 tea/coffee breaks▪ Sit-down lunch▪ Orange juice at lunch time (1 jug for 5 people)▪ 1 bottle of water per person	<u>Facilities (per room):</u> <ul style="list-style-type: none">▪ Projector: £189▪ Flipchart: £15 <u>Refreshments / Food:</u> <ul style="list-style-type: none">▪ Coffee break: £2.50 per break per person▪ Orange juice: £10 per jug (serves 5 people)▪ Sit-down lunch: £20 per person▪ Buffet lunch: £17 per person▪ Water: £5 per bottle
<u>NOTE</u> Minimum of 8 participants applies. If the number of participants is less than 8, the fee will be charged for 8 people.	No minimum requirement on the number of participants applies.

All prices quoted above include VAT on all items.

The company organises a conference for 50 participants on a Monday, hiring a room by itself and using their own caterer, which charges £30 per person. To authorise the customer to use their own caterer, the hotel adds a surcharge of 12% on the room hire cost. What is the average cost per person?

- a. £30.00 b. £32.67 c. £35.00 d. £37.84 e. £40.00



Q.R 4

World News	
Q. no.	Answer
1	c
2	e
3	d
4	d
5	d
6	d
7	b

Going for a Ride	
Q. no.	Answer
8	a
9	c
10	d
11	c
12	d
13	c
14	c

Hot Chocolate	
Q. no.	Answer
15	d
16	a
17	c
18	c
19	c
20	c

Time Traveller	
Q. no.	Answer
21	e
22	c
23	d
24	e
25	d
26	d

Conferencing & Banqueting	
Q. no.	Answer
27	d
28	d
29	e
30	c
31	d



Home Assignment

1250 UCAT Practice Question Book: Quantitative Reasoning Practice

Set 20	Fishy Business
Set 22	D.I.Y
Set 27	Milking It
Set 28	A Colourful Life



Thank you