

Maths Mock Test Paper 24

Name: _____

Date: _____

Time allowed: **50 minutes****50 questions**, 1 mark each

Answer **every** question. Each question has five options, **A** to **E**, and exactly one is correct. Work out the answer and mark the letter you have chosen. Marks are not taken away for a wrong answer, so it is worth having a go at every question. **Calculators and rulers are not allowed.**

Q1. In a box of apples the ratio of red apples to green apples is 5 : 3. There are 15 red apples. How many green apples are there?

- A. 3 B. 5 C. 9 D. 12 E. 25

Q2. A room floor measures 6 m by 4 m. What is its area?

- A. 10 m² B. 20 m² C. 24 m² D. 28 m² E. 36 m²

Q3. Aisha writes down every factor of 18. How many numbers does she write down?

- A. 6 B. 4 C. 5 D. 8 E. 9

Q4. A runner completes 8 laps of a 395-metre track. Estimate the total distance by rounding 395 to the nearest 100.

- A. 2,800 B. 3,160 C. 3,200 D. 3,500 E. 4,000

Q5. How many lines of symmetry does this parallelogram have?



- A. 0 B. 1 C. 2 D. 3 E. 4

Q6. Write the number 'three hundred thousand and twenty' in digits.

- A. 300,200 B. 30,020 C. 300,020 D. 3,000,020 E. 300,002

Q7. The pictogram shows how many stickers four children collected. How many more stickers did Cara collect than Ben?

Amy ○ ○ ○ D

Ben ○ ○

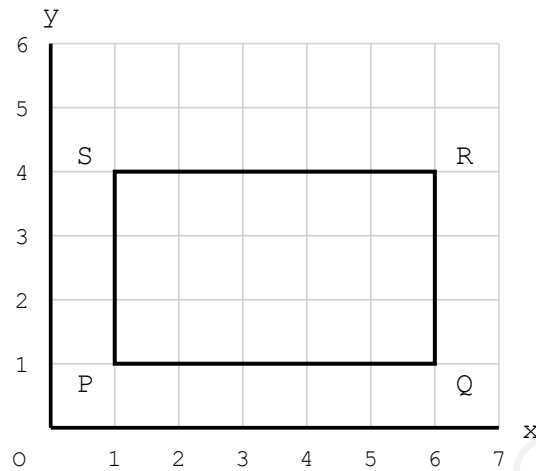
Cara ○ ○ ○ ○

Dan ○ D

Key: ○ = 10 stickers

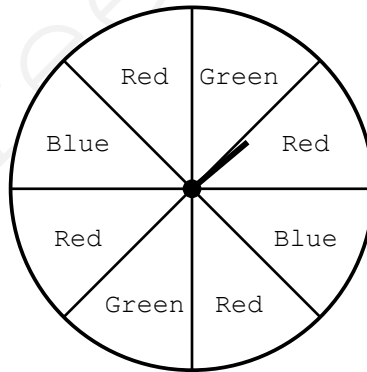
- A. 2 B. 10 C. 25 D. 20 E. 30

Q8. PQRS is a rectangle. What are the coordinates of corner R?



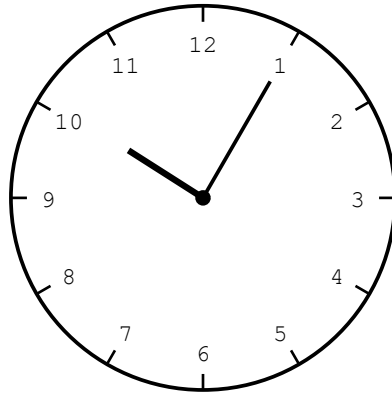
- A. (1, 4) B. (4, 6) C. (6, 1) D. (6, 4) E. (4, 4)

Q9. On which colour is this spinner twice as likely to land as on blue?



- A. Red
B. Blue
C. Green
D. Red or green together
E. No colour on the spinner

Q10. The clock shows the time a swimming session started. It finished at 11:20. How long did the session last?



- A. 45 minutes
- B. 1 hour 5 minutes
- C. 1 hour 20 minutes
- D. 1 hour 25 minutes
- E. 1 hour 15 minutes

Q11. A square patio is made from 121 square tiles. How many tiles are there along each side?

- A. 10
- B. 11
- C. 12
- D. 20
- E. 60.5

Q12. Which of these times is closest to midday?

- A. 10:50
- B. 11:35
- C. 12:40
- D. 13:05
- E. 11:20

Q13. A holiday costs £1,847.65. Round this to the nearest pound.

- A. £1,847
- B. £1,847.65
- C. £1,847.70
- D. £1,848
- E. £1,850

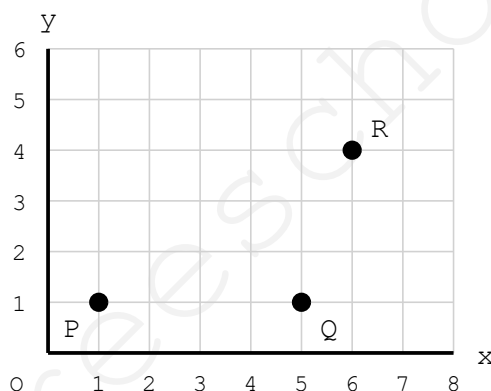
Q14. In a sequence, each term is found by multiplying the term before it by 3 and then subtracting 2. The fourth term is 28. What is the first term?

- A. 2 B. 3 C. 4 D. 6 E. 10

Q15. A drink is made from juice and water in the ratio 2 : 7. How much juice is there in 900 ml of the drink?

- A. 100 ml B. 150 ml C. 200 ml D. 250 ml E. 700 ml

Q16. P, Q and R are three corners of a parallelogram PQRS. What are the coordinates of corner S?

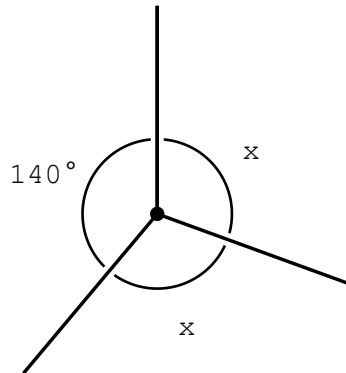


- A. (1, 4) B. (2, 4) C. (2, 3) D. (3, 4) E. (10, 4)

Q17. In a game you win 5 points for a hit and lose 8 points for a miss. Ravi has 3 hits and 4 misses. What is his score?

- A. -47 B. -13 C. 13 D. -17 E. 17

Q18. Three angles meet at a point, and two of them are equal. Work out the size of one of the equal angles.



- A. 70° B. 100° C. 120° D. 220° E. 110°

Q19. What number take away 47 gives 68?

- A. 21 B. 105 C. 111 D. 115 E. 125

Q20. A rectangle has a perimeter of 30 cm, and both of its sides are a whole number of centimetres. Which of these could NOT be its area?

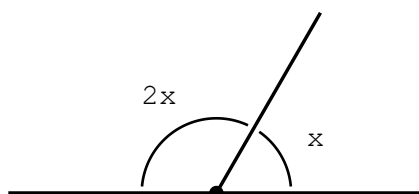
- A. 60 cm^2 B. 14 cm^2 C. 26 cm^2 D. 36 cm^2 E. 54 cm^2

Q21. The table shows the ingredients for 6 pancakes. How much milk is needed to make 15 pancakes?

Ingredient	For 6 pancakes
Flour	120 g
Milk	200 ml
Eggs	2

- A. 300 ml B. 500 ml C. 450 ml D. 550 ml E. 600 ml

Q22. Work out the value of x .



- A. 45° B. 60° C. 72° D. 90° E. 120°

Q23. Two taps drip at the same moment. One drips every 9 seconds and the other every 12 seconds. After how many seconds do they next drip together?

- A. 3 B. 18 C. 21 D. 36 E. 108

Q24. What is $121 \div 11$?

- A. 9 B. 10 C. 11 D. 12 E. 22

Q25. Ella has three £20 notes, four £1 coins and six 10p coins. How much money does she have?

- A. £64.06 B. £64.60 C. £70.60 D. £64.10 E. £24.60

Q26. The table shows the length of four streams. Which stream is the longest?

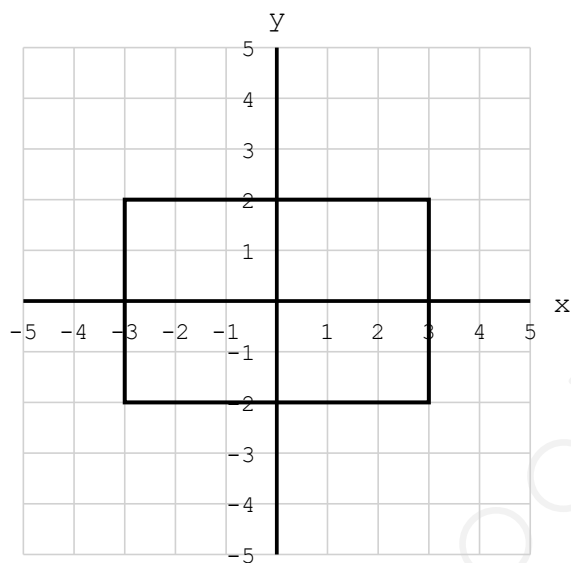
Stream	Length
Ash Brook	2,400 m
Bell River	2.6 km
Crow Beck	1,950 m
Dee Water	2.35 km

- A. Ash Brook
- B. Crow Beck
- C. Dee Water
- D. Bell River
- E. They are all the same length

Q27. A meal costs £40 and a tip of 10% is added. How much is paid altogether?

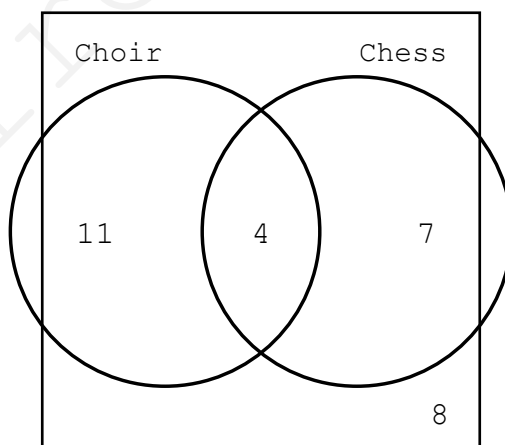
- A. £36
- B. £41
- C. £44
- D. £45
- E. £50

Q28. What are the coordinates of the centre of this rectangle?



- A. (0, 0) B. (1, 0) C. (0, 1) D. (3, 2) E. (-3, -2)

Q29. The Venn diagram shows which of 30 pupils belong to the choir and the chess club. How many pupils belong to the choir?



- A. 4 B. 11 C. 19 D. 22 E. 15

Q30. Use the train timetable. Nadia must reach Shrewsbury before 10:15. What is the latest train she can catch from Newport?

Station	A	B	C	D
Newport	06:55	07:40	08:25	09:10
Cwmbran	07:08	07:53	08:38	09:23
Hereford	07:52	08:37	09:22	10:07
Shrewsbury	08:35	09:20	10:05	10:50

- A. 07:40 B. 08:25 C. 09:10 D. 09:23 E. 10:05

Q31. Four people share a bill of £46 equally. How much does each person pay?

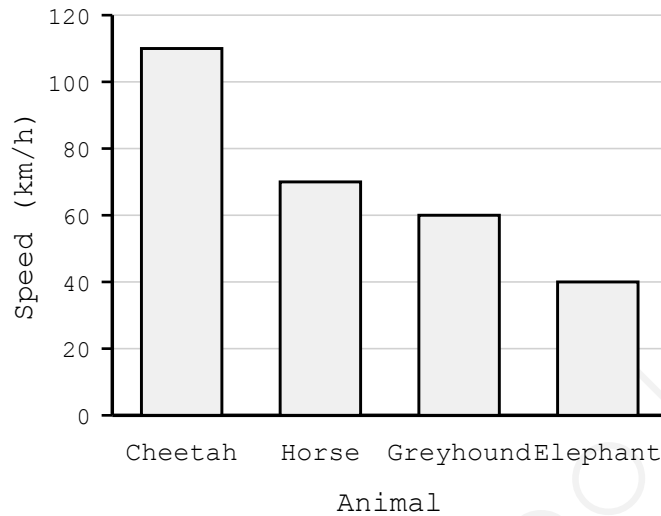
- A. £10.50 B. £11.00 C. £11.50 D. £12.00 E. £12.50

Q32. The table shows how many tiles are needed to make each pattern in a sequence. Which pattern uses exactly 100 tiles?

Pattern number	Tiles used
1	4
2	7
3	10
4	13

- A. Pattern 25
B. Pattern 30
C. Pattern 32
D. Pattern 33
E. Pattern 34

Q33. The bar chart shows the top speed of four animals. How much faster is the cheetah than the horse?



- A. 70 km/h B. 50 km/h C. 30 km/h D. 180 km/h E. 40 km/h

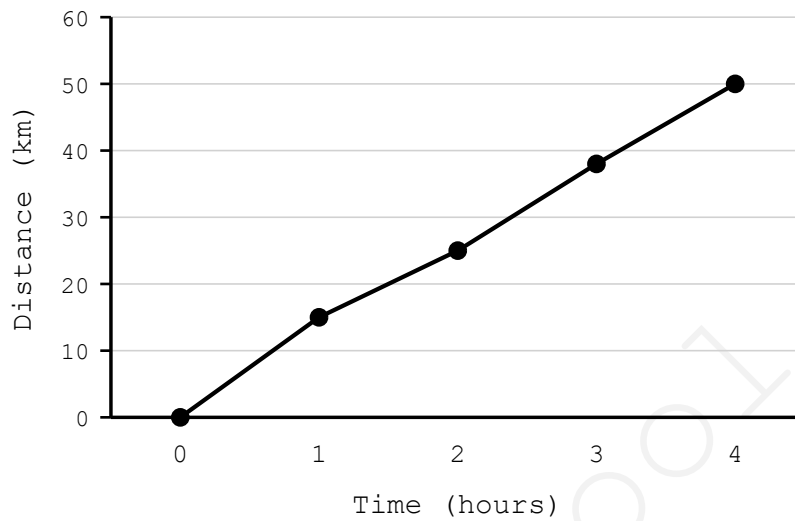
Q34. The temperature fell by 11 degrees to reach -4°C . What was the temperature before the fall?

- A. -15°C B. -7°C C. 7°C D. 11°C E. 15°C

Q35. To estimate $4,762 + 2,381$, Sam rounds each number to the nearest thousand and adds. Is his estimate bigger or smaller than the exact answer, and why?

- A. Smaller, because more was taken off 2,381 than was added to 4,762
 B. Smaller, because both numbers were rounded down
 C. Bigger, because both numbers were rounded up
 D. Bigger, because 4,762 was rounded up to 5,000
 E. Exactly the same, because the two roundings cancel out

Q36. The line graph shows how far a cyclist had travelled during an afternoon. What was her average speed over the whole four hours?



- A. 10 km/h B. 12.5 km/h C. 13 km/h D. 15 km/h E. 50 km/h

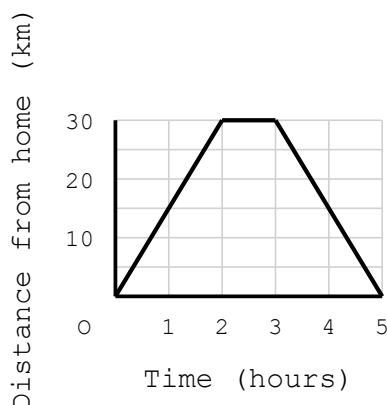
Q37. A car covers the first 120 km of a 360 km journey at 60 km/h and the remaining 240 km at 80 km/h. What is its average speed for the whole journey?

- A. 66 km/h B. 70 km/h C. 72 km/h D. 75 km/h E. 80 km/h

Q38. A shop opens from 08:30 to 17:45 on each of five weekdays, and from 09:00 to 13:00 on Saturday. For how long is the shop open in one week?

- A. 46 hours 15 minutes
 B. 50 hours 15 minutes
 C. 49 hours 15 minutes
 D. 50 hours 45 minutes
 E. 51 hours

Q39. Use the same cycle ride graph. What was Priya's speed on the journey home?



- A. 10 km/h B. 12 km/h C. 15 km/h D. 20 km/h E. 30 km/h

Q40. Three cups of tea and two cakes cost £9.50 altogether. Three cups of tea and one cake cost £7.00. How much does one cup of tea cost?

- A. £1.00 B. £1.50 C. £2.00 D. £2.50 E. £3.00

Q41. On a map, 1 cm represents 250 m. A footpath is drawn 3.4 cm long. How long is the real path, in kilometres?

- A. 0.6 km B. 0.75 km C. 0.85 km D. 1.25 km E. 8.5 km

Q42. In the number 2,846,375, the value of the digit 8 is multiplied by the value of the digit 7. What is the answer?

- A. 56,000,000
B. 56
C. 56,000
D. 560,000
E. 5,600,000

Q43. What is $30 \div (-5) - (-8)$?

- A. -14 B. -2 C. 2 D. 6 E. 14

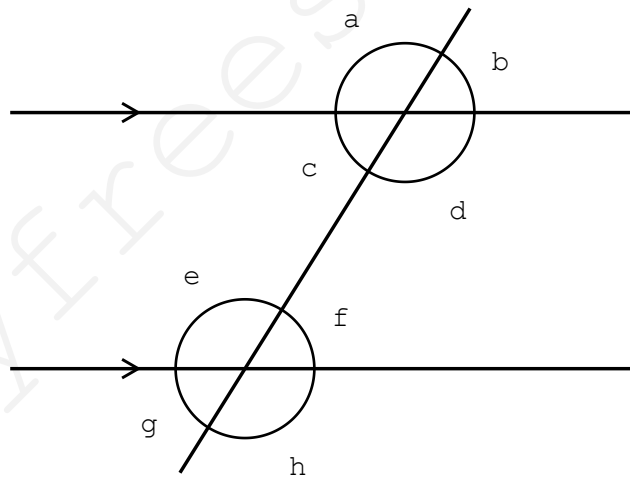
Q44. What is $2 \frac{3}{4} - 1 \frac{5}{6}$?

- A. $\frac{1}{12}$ B. $\frac{5}{12}$ C. $\frac{11}{12}$ D. $1 \frac{1}{6}$ E. $1 \frac{5}{12}$

Q45. A rectangle is 12 cm long and 8 cm wide. A second rectangle has the same area but is 16 cm long. What is the perimeter of the second rectangle?

- A. 32 cm B. 40 cm C. 48 cm D. 44 cm E. 56 cm

Q46. The two horizontal lines are parallel. Which angle must always be equal to angle a, whatever the slope of the crossing line?



- A. angle e B. angle b C. angle c D. angle f E. angle g

Q47. The table shows the cost of hiring a bicycle. What is the least it can cost to hire one for 5 hours?

Bicycle hire	Cost
First hour	£4.50
Each extra hour	£3.00
All day	£16.00

- A. £14.50 B. £16.50 C. £19.50 D. £22.50 E. £16.00

Q48. Round 2,995,000 to 3 significant figures.

- A. 2,990,000 B. 2,995,000 C. 3,000,000 D. 3,000,500 E. 3,100,000

Q49. The number 6 is a perfect number, because its factors apart from itself (1, 2 and 3) add up to 6. Which of these is also a perfect number?

- A. 12 B. 16 C. 24 D. 28 E. 30

Q50. Two whole numbers multiply together to give 84 and add together to give 19. What is the larger of the two numbers?

- A. 12 B. 6 C. 7 D. 14 E. 21