

Maths Mock Test Paper 18

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. A bowl holds 3 apples for every 2 oranges. There are 6 oranges in the bowl. How many apples are there?

- A. 4 B. 6 C. 9 D. 12 E. 15

Q2. What is 5×11 ?

- A. 45 B. 50 C. 55 D. 56 E. 60

Q3. Chloe writes three thousand, two hundred and seven in figures as 32,007. What has gone wrong?

- A. She has written an extra zero in the tens column
B. She has written the digits in the wrong order
C. She has left out the hundreds digit
D. She has written an extra zero in the hundreds column
E. Nothing: the number is correct

Q4. Use the after-school club timetable. Which club lasts the longest?

Club	Day	Starts	Ends
Chess	Monday	15:30	16:45
Art	Tuesday	15:40	17:00
Football	Thursday	15:25	16:55

- A. Chess
- B. Art
- C. Football
- D. Chess and Art are equal
- E. All three are the same length

Q5. What is $-5 + 3$?

- A. -8
- B. -2
- C. 2
- D. 8
- E. 15

Q6. A concert was attended by 4,538 people, and a newspaper reported that about 5,000 people came. To what has the number been rounded?

- A. The nearest 10
- B. The nearest 100
- C. The nearest 1,000
- D. The nearest 10,000
- E. It has not been rounded at all

Q7. A box measures 10 cm by 10 cm by 2 cm. What is its volume?

- A. 22 cm³
- B. 100 cm³
- C. 120 cm³
- D. 200 cm³
- E. 1,000 cm³

Q8. Five children scored 6, 8, 8, 9 and 14 marks in a test. What is the mode of their scores?

- A. 6 B. 8 C. 9 D. 14 E. 45

Q9. A cyclist rides 18 km in 1.5 hours. What is the average speed?

- A. 9 km/h B. 10 km/h C. 12 km/h D. 18 km/h E. 27 km/h

Q10. Which of these shapes always has four right angles?

- A. Rhombus
B. Parallelogram
C. Rectangle
D. Trapezium
E. Kite

Q11. The diagonals of a rectangle always cross at its centre. Where do the diagonals of the rectangle with corners (0, 0), (10, 0), (10, 6) and (0, 6) cross?

- A. (5, 6) B. (10, 3) C. (3, 5) D. (6, 5) E. (5, 3)

Q12. What is the mean of these six numbers?

14, 9, 21, 6, 15, 13

- A. 11 B. 12 C. 12.5 D. 13 E. 14

Q13. Sara saves £3.50 every week. After how many weeks will she first have saved at least £30?

- A. 8 B. 9 C. 10 D. 11 E. 12

Q14. One parcel weighs 3.6 kg and another weighs 950 g. What do the two parcels weigh together?

- A. 3.95 kg B. 4.5 kg C. 4.55 kg D. 4.65 kg E. 12.6 kg

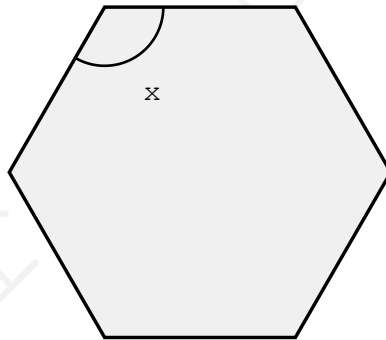
Q15. A cuboid has a volume of 120 cm^3 and a base area of 24 cm^2 . What is its height?

- A. 3 cm B. 4 cm C. 5 cm D. 6 cm E. 8 cm

Q16. Six identical books weigh 2.4 kg altogether. What do nine of the same books weigh?

- A. 2.7 kg B. 3.2 kg C. 3.6 kg D. 4 kg E. 4.8 kg

Q17. This is a regular hexagon. Work out the size of angle x.



- A. 60° B. 90° C. 100° D. 108° E. 120°

Q18. A number rounded to 1 significant figure is 500. Which of these could be the original number?

- A. 449 B. 450 C. 550 D. 551 E. 600

Q19. A runner covers 3 km in 12 minutes. At the same speed, how long would 8 km take?

- A. 24 minutes
- B. 28 minutes
- C. 32 minutes
- D. 36 minutes
- E. 40 minutes

Q20. The rule of a sequence is "multiply by 3, then subtract 2", and the first term is 2. What is the third term?

- A. 4
- B. 8
- C. 10
- D. 12
- E. 16

Q21. Which of these is the same as 2 hours 5 minutes?

- A. 25 minutes
- B. 115 minutes
- C. 125 minutes
- D. 130 minutes
- E. 205 minutes

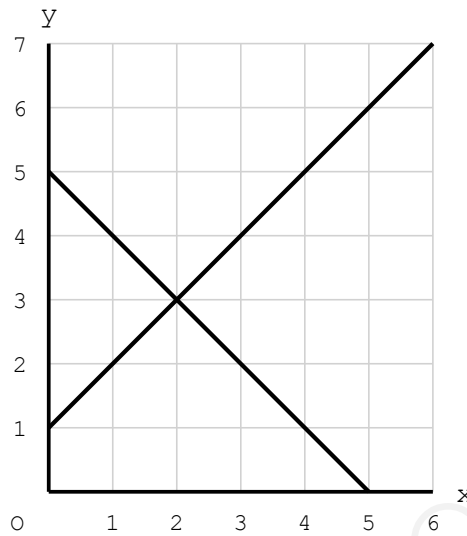
Q22. Convert 3,200 ml to litres.

- A. 0.32 litres
- B. 3.02 litres
- C. 3.2 litres
- D. 32 litres
- E. 320 litres

Q23. Two friends cycle the same 24 km route. One takes 2 hours and the other takes 1 hour 30 minutes. How much faster is the second cyclist?

- A. 2 km/h
- B. 3 km/h
- C. 4 km/h
- D. 6 km/h
- E. 8 km/h

Q24. The lines $y = x + 1$ and $y = 5 - x$ are drawn on the grid. What are the coordinates of the point where they cross?



- A. (1, 5) B. (2, 3) C. (3, 2) D. (2, 4) E. (3, 4)

Q25. A submarine dives from a depth of -25 m to a depth of -60 m. How far does it dive?

- A. 25 m B. 35 m C. 45 m D. 60 m E. 85 m

Q26. What is $96 \div 8$?

- A. 8 B. 10 C. 11 D. 12 E. 16

Q27. In a club the ratio of girls to boys is $5 : 4$. There are 12 more girls than boys. How many members are in the club altogether?

- A. 36 B. 72 C. 96 D. 108 E. 120

Q28. Three friends share the cost of a £54 present equally. One of them also pays £6 for the card. How much does that friend pay altogether?

- A. £18 B. £20 C. £24 D. £27 E. £30

Q29. A teacher has 48 pencils and 36 rubbers. She makes identical packs using all of them. What is the greatest number of packs she can make?

- A. 6 B. 8 C. 12 D. 16 E. 24

Q30. A jacket costing £45 is reduced to £36 in a sale. What percentage has been taken off the price?

- A. 9% B. 15% C. 20% D. 25% E. 80%

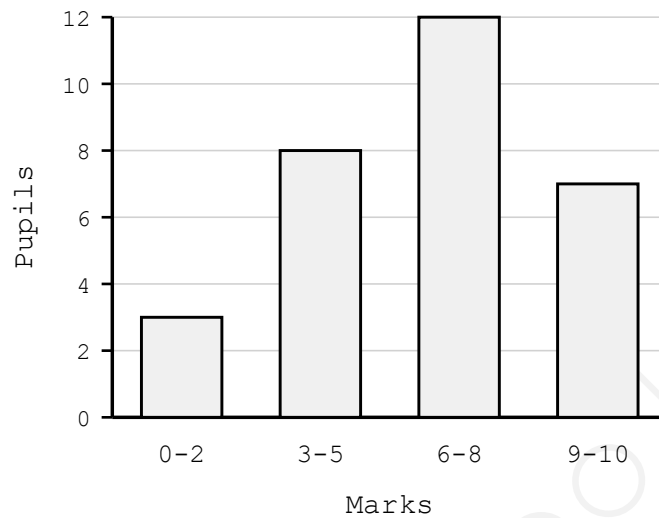
Q31. Ben says that 0.45 is bigger than 0.5, because 45 is bigger than 5. Why is he wrong?

- A. 0.45 is 45 hundredths and 0.5 is 50 hundredths, so 0.5 is the bigger number
B. A decimal with more digits is always the smaller one
C. The two numbers are worth exactly the same
D. He is not wrong: 0.45 really is bigger
E. Decimals cannot be compared with one another at all

Q32. A rectangle has a perimeter of 46 cm and a width of 8 cm. What is its length?

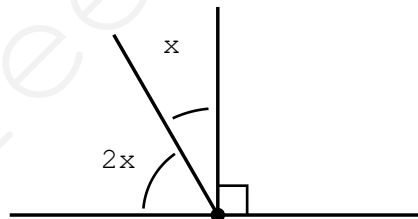
- A. 12 cm B. 15 cm C. 19 cm D. 23 cm E. 38 cm

Q33. Use the bar chart. How many pupils scored 6 marks or more?



- A. 19 B. 20 C. 22 D. 23 E. 25

Q34. Work out the value of x .



- A. 20° B. 30° C. 36° D. 45° E. 60°

Q35. Estimate 0.49×20 by rounding 0.49 to 1 significant figure.

- A. 8 B. 9.8 C. 10 D. 11 E. 20

Q36. Which number is $6 \times 1,000 + 4 \times 10 + 9 \times 0.1$?

- A. 640.9 B. 6,004.9 C. 6,040.9 D. 6,049 E. 6,409

Q37. The angles of a quadrilateral are in the ratio 1 : 2 : 2 : 3. What is the largest angle?

- A. 45° B. 72° C. 90° D. 135° E. 144°

Q38. A straight line crosses the y-axis at (0, 6) and the x-axis at (3, 0). What is its equation?

- A. $y = 6 - x$
B. $y = 3 - 2x$
C. $y = 2x + 6$
D. $y = 6x - 3$
E. $y = 6 - 2x$

Q39. A cyclist rides at an average speed of 15 km/h. How many minutes does it take to ride 4 km?

- A. 12 B. 15 C. 16 D. 18 E. 20

Q40. What is 18×15 ?

- A. 240 B. 250 C. 260 D. 270 E. 290

Q41. A car park is a 15 m by 9 m rectangle with a 6 m by 4 m rectangle removed from one corner. What is its area?

- A. 87 m^2 B. 99 m^2 C. 105 m^2 D. 111 m^2 E. 135 m^2

Q42. Which of these shows 84 written as a product of prime numbers only?

- A. 2×42
B. 4×21
C. $2 \times 3 \times 14$
D. $3 \times 4 \times 7$
E. $2 \times 2 \times 3 \times 7$

Q43. In a survey of 80 people, 45 own a cat and 38 own a dog. 12 people own neither. How many people own both?

- A. 9 B. 11 C. 13 D. 15 E. 17

Q44. The first four terms of a sequence are 2, 5, 10, 17. Which rule makes this sequence?

- A. Add 3 to the term before
B. Double the term before and add 1
C. Add the two terms before
D. Square the position number and add 1
E. Double the position number and subtract 1

Q45. Grapes cost £3.50 per kilogram. What is the cost of 2.4 kg?

- A. £7.00 B. £7.40 C. £8.40 D. £8.75 E. £9.60

Q46. A tank holds 900 litres when full. It is two thirds full, and then 150 litres are drawn off. How much water is left in it?

- A. 150 litres
B. 300 litres
C. 450 litres
D. 600 litres
E. 750 litres

Q47. A weight is measured as 12.6 kg to the nearest 0.1 kg. What is the SMALLEST value the weight could be?

- A. 12.5 kg B. 12.54 kg C. 12.55 kg D. 12.56 kg E. 12.6 kg

Q48. In a class, $\frac{3}{5}$ of the pupils are girls. Of those girls, $\frac{1}{3}$ wear glasses. What fraction of the whole class are girls who wear glasses?

- A. $\frac{1}{8}$ B. $\frac{1}{5}$ C. $\frac{4}{15}$ D. $\frac{3}{8}$ E. $\frac{2}{5}$

Q49. In a school the ratio of boys to girls is 7 : 5. If 24 more girls joined, there would be equal numbers of boys and girls. How many boys are in the school?

- A. 60 B. 72 C. 84 D. 96 E. 144

Q50. What is $-20 \div 4 + 7$?

- A. -12 B. -2 C. 2 D. 12 E. 27