

Maths Mock Test Paper 20

Name: _____

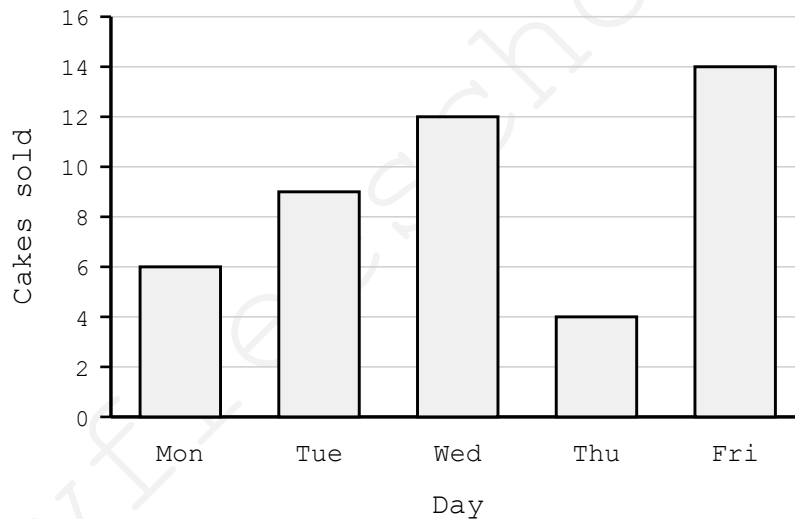
Date: _____

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. The bar chart shows how many cakes a stall sold on five days. On which two days together did the stall sell exactly 20 cakes?



- A. Monday and Tuesday
- B. Monday and Friday
- C. Tuesday and Wednesday
- D. Wednesday and Thursday
- E. Thursday and Friday

Q2. How many lines of symmetry does this rectangle have?



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

Q3. Round 3,850 to the nearest 1,000.

- A. 3,000 B. 3,800 C. 3,850 D. 3,900 E. 4,000

Q4. Which of these numbers can be shared equally between 3 children with none left over?

- A. 47 B. 58 C. 64 D. 72 E. 85

Q5. The table goes with the rule $y = x + 3$. What number is missing?

x: 1, 2, 3, 4
y: 4, 5, ?, 7

- A. 5 B. 6 C. 7 D. 8 E. 9

Q6. Which of these numbers is read aloud as "six point zero five"?

- A. 6.5 B. 6.05 C. 6.005 D. 60.5 E. 0.605

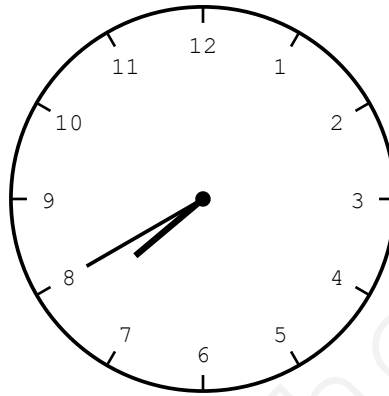
Q7. A rectangle measures 10 cm by 7 cm. What is its perimeter?

- A. 17 cm B. 24 cm C. 34 cm D. 40 cm E. 70 cm

Q8. Which decimal is the same as $\frac{1}{4}$?

- A. 0.14 B. 0.25 C. 0.4 D. 0.5 E. 1.4

Q9. The clock shows the time on a summer evening. How is that time written on a 24-hour clock?



- A. 07:40 B. 08:20 C. 19:20 D. 19:40 E. 20:40

Q10. In which of these sequences is the same number added each time?

- A. 2, 4, 8, 16
B. 1, 4, 9, 16
C. 3, 7, 11, 15
D. 1, 2, 4, 7
E. 10, 9, 7, 4

Q11. A coat costs £80. It is reduced by 15% in a sale. What is the sale price?

- A. £12 B. £65 C. £68 D. £72 E. £75

Q12. Use the bus timetable. How often do buses leave Market Square?

Bus stop	Bus 1	Bus 2	Bus 3	Bus 4
Market Square	09:12	09:32	09:52	10:12
Park Gates	09:26	09:46	10:06	10:26
Hospital	09:41	10:01	10:21	10:41
Airport	10:05	10:25	10:45	11:05

- A. Every 10 minutes
- B. Every 15 minutes
- C. Every 20 minutes
- D. Every 25 minutes
- E. Every 30 minutes

Q13. A baker uses 250 g of flour for each loaf and has a 10 kg bag of flour. Each loaf sells for £2.40. To work out how many whole loaves the bag will make, which of these is NOT needed?

- A. the flour used in one loaf
- B. the amount of flour in the bag
- C. the price of a loaf
- D. that 1 kg is 1,000 g
- E. that a loaf has to be whole

Q14. A 1.2 litre drink is made from juice and water in the ratio 1 : 5. How much water does it contain?

- A. 200 ml
- B. 240 ml
- C. 600 ml
- D. 960 ml
- E. 1000 ml

Q15. The first term of a sequence is 96, and every term after it is half the term before. What is the 5th term?

- A. 3
- B. 6
- C. 12
- D. 24
- E. 48

Q16. What is $132 \div 11$?

- A. 10 B. 11 C. 12 D. 13 E. 22

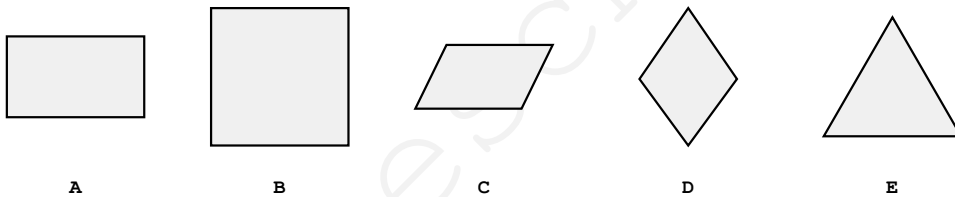
Q17. A number has 5 thousands, 2 hundreds and 6 ones. What is the number?

- A. 5,206 B. 5,260 C. 5,026 D. 5,620 E. 5,602

Q18. What is the difference between -17 and 8 ?

- A. 9 B. 15 C. 17 D. 25 E. 27

Q19. Which of these shapes has rotational symmetry of order 4?



- A. A B. B C. C D. D E. E

Q20. Solve for x .

$$30 - 2x = 12$$

- A. 6 B. 9 C. 12 D. 15 E. 21

Q21. A fair dice with faces 1 to 6 is rolled once. Which is more likely, an even number or a number greater than 4, and what is the probability of the more likely one?

- A. An even number, with a probability of $\frac{1}{2}$
- B. An even number, with a probability of $\frac{1}{3}$
- C. A number greater than 4, with a probability of $\frac{1}{2}$
- D. A number greater than 4, with a probability of $\frac{1}{3}$
- E. They are equally likely

Q22. Amy, Ben and Chris have stamps in the ratio 2 : 3 : 5. Chris has 45 stamps. How many does Amy have?

- A. 9
- B. 15
- C. 18
- D. 27
- E. 30

Q23. A farmer keeps only chickens and cows. There are 20 animals with 56 legs altogether. How many cows are there?

- A. 6
- B. 8
- C. 10
- D. 12
- E. 14

Q24. A cube has edges of 8 cm. What is its volume?

- A. 24 cm^3
- B. 64 cm^3
- C. 192 cm^3
- D. 384 cm^3
- E. 512 cm^3

Q25. A recipe needs 1.5 litres of stock. Ravi has three cartons holding 400 ml each. How much more stock does he need?

- A. 100 ml
- B. 200 ml
- C. 300 ml
- D. 500 ml
- E. 1.1 litres

Q26. Two angles are vertically opposite. One is $3x$ and the other is 75° . What is the value of x ?

- A. 15°
- B. 25°
- C. 35°
- D. 45°
- E. 75°

Q27. A kitchen clock runs 4 minutes fast. It shows 14:20. What is the real time?

- A. 14:04 B. 14:16 C. 14:24 D. 14:26 E. 14:36

Q28. Estimate 0.48×0.52 by rounding each number to 1 significant figure.

- A. 0.2 B. 0.24 C. 0.2496 D. 0.25 E. 0.3

Q29. The difference between two numbers is 9, and one of them is -4. Which of these could the other number be?

- A. -13 B. -5 C. 4 D. 9 E. 13

Q30. What is 7,482 rounded to the nearest hundred?

- A. 7,400 B. 7,500 C. 7,480 D. 7,300 E. 7,600

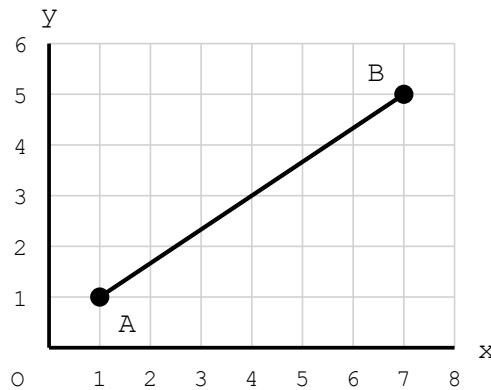
Q31. Without doing the division, how can you tell that 2,376 divides exactly by 4?

- A. its last digit is even
B. its digits add up to 18
C. the number made by its last two digits, 76, divides by 4
D. it is a multiple of 3
E. it ends in a 6

Q32. What is 22% of 350?

- A. 66 B. 70 C. 72 D. 77 E. 84

Q33. The grid shows the straight line drawn from A to B. Which of these points lies on that line?



- A. (2, 2) B. (3, 3) C. (4, 3) D. (5, 4) E. (6, 4)

Q34. What is $297 + 58$?

- A. 335 B. 345 C. 350 D. 355 E. 365

Q35. A train travels for 45 minutes at a steady 80 km/h, then waits at a station for 15 minutes. How far has it travelled in that hour?

- A. 45 km B. 60 km C. 65 km D. 70 km E. 80 km

Q36. Two alarms sound together at 09:00. One repeats every 15 minutes and the other every 20 minutes. What time do they next sound together?

- A. 09:20 B. 09:35 C. 09:45 D. 10:00 E. 10:15

Q37. How many full 300 ml bottles can be filled from 5 litres of squash?

- A. 14 B. 15 C. 16 D. 17 E. 18

Q38. What is $1,080 \div 12$?

- A. 80 B. 85 C. 90 D. 95 E. 108

Q39. Ben adds two prime numbers together and gets 20. Which pair of numbers could he have used?

- A. 3 and 17 B. 5 and 15 C. 9 and 11 D. 10 and 10 E. 2 and 18

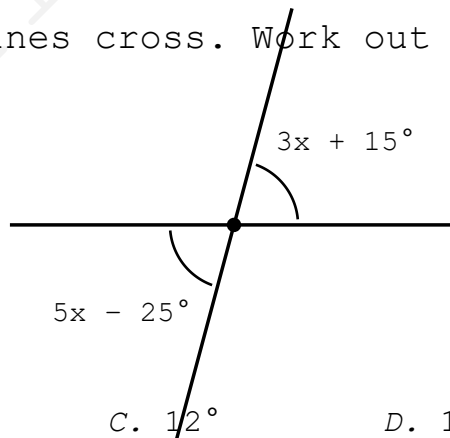
Q40. What is -9×7 ?

- A. -72 B. -63 C. -16 D. 16 E. 63

Q41. A jacket costs £36. Which of these offers takes the most off the price?

- A. one third off
B. 30% off
C. £11 off
D. a quarter off
E. £10 off

Q42. Two straight lines cross. Work out the value of x .



- A. 5° B. 10° C. 12° D. 15° E. 20°

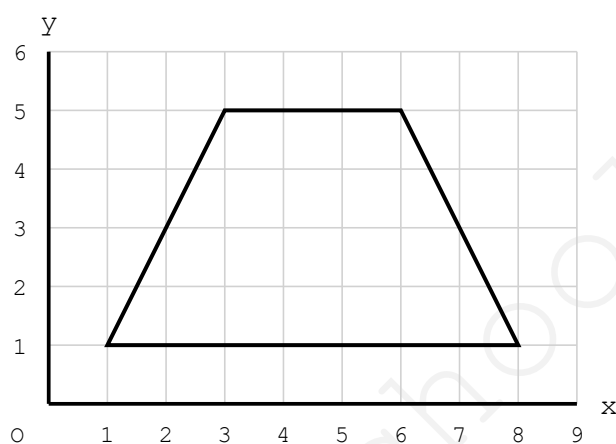
Q43. How many times must 0.007 be multiplied by 10 to reach 70?

- A. 2 B. 3 C. 4 D. 5 E. 6

Q44. Estimate $5,847 \times 0.312$ by rounding each number to 1 significant figure.

- A. 1,200 B. 1,500 C. 1,800 D. 1,824 E. 2,000

Q45. What is the area of this trapezium, in squares?



- A. 16 B. 20 C. 24 D. 28 E. 35

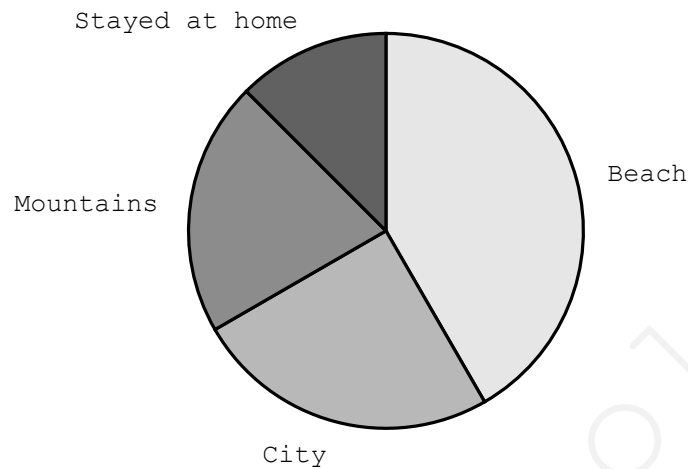
Q46. Two cubes with 3 cm edges are glued together face to face to make a cuboid. What is the total area of the outside surface of that cuboid?

- A. 72 cm^2 B. 90 cm^2 C. 96 cm^2 D. 108 cm^2 E. 126 cm^2

Q47. The price of a bike goes up by the same amount every year. It cost £120 in 2020 and £180 in 2023. At that rate, what will it cost in 2025?

- A. £200 B. £210 C. £220 D. £240 E. £260

Q48. The pie chart shows where 720 people went on holiday. The beach sector has an angle of 150° . How many people went to the beach?



- A. 150 B. 200 C. 240 D. 300 E. 360

Q49. Eight people can finish a job in 6 hours. They all work for 2 hours and then 4 of them leave. How much longer do the rest need to finish the job?

- A. 4 hours B. 6 hours C. 8 hours D. 10 hours E. 12 hours

Q50. A runner covers 400 m in 50 seconds. Running at that same speed, how long does 3 km take?

- A. 5 minutes
 B. 6 minutes 15 seconds
 C. 6 minutes 40 seconds
 D. 7 minutes 30 seconds
 E. 8 minutes