Maths Mock Test Paper 7

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. Use the swimming pool timetable. What time does the Diving session start?

Session	Starts	Ends
Beginners	09:30	10:15
Improvers	10:30	11:25
Diving	11:40	12:20
Family	13:00	14:30

A. 09:30 B. 10:15 C. 10:30 D. 11:25 E. 11:40

Q2. A submarine is at −30 m. It rises 12 m. What is its new depth?

A. −42 m B. −22 m C. −18 m D. 18 m E. 42 m

Q3. Which of these points lies to the left of the y-axis?

A. (2, 5) B. (5, 2) C. (0, 4) D. (−4, 1) E. (3, −2)

Q4. Write the ratio 18 : 24 in its simplest form.

A. 3 : 4 B. 4 : 3 C. 2 : 3 D. 5 : 6 E. 1 : 2

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Q5. How many millilitres are there in 4 litres?

A. 40 ml

B. 400 ml

C. 4,000 ml

D. 40,000 ml

E. 400,000 ml

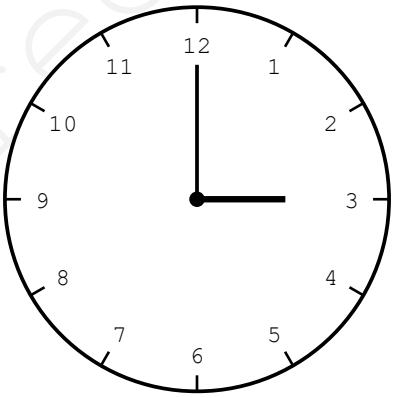
Q6. A cube has edges of 6 cm. What is its volume?

A. 18 cm^3 B. 36 cm^3 C. 72 cm^3 D. 216 cm^3 E. 360 cm^3

Q7. What is 10,000 more than 89,541?

A. 89,641 B. 895,410 C. 99,541 D. 189,541 E. 90,541

Q8. What is the size of the angle between the hands of this clock?



A. 30° B. 45° C. 60° D. 90° E. 120°

Q9. If y = 9, what is the value of y − 4?

A. 4 B. 5 C. 6 D. 13 E. 36

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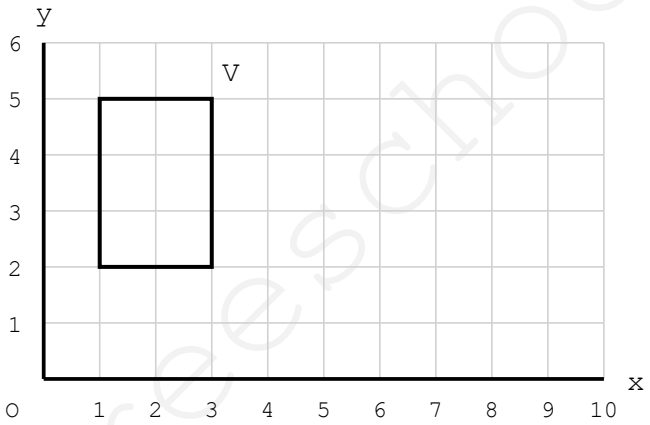
Q10. What is 2.5 × 4?

A. 8 B. 9 C. 10 D. 10.5 E. 25

Q11. Point A is at −7 on a number line and point B is at 6. What is the distance from A to B?

A. 1 B. 6 C. 7 D. 13 E. 42

Q12. The shape is translated 4 squares right and 1 square down. What are the coordinates of the new position of corner V?



A. (7, 4) B. (6, 4) C. (7, 6) D. (5, 4) E. (6, 6)

Q13. A film starts at 19:45 and lasts 2 hours 20 minutes. At what time does it finish?

A. 21:05 B. 21:45 C. 22:05 D. 22:15 E. 22:25

Q14. Which of these has the lowest value?

A. 7/20 B. 36% C. 3/8 D. 0.39 E. 0.4

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Q15. In a school 2/5 of the pupils are boys and the rest are girls. What is the ratio of boys to girls?

A. 2 : 5 B. 5 : 2 C. 2 : 3 D. 3 : 2 E. 1 : 4

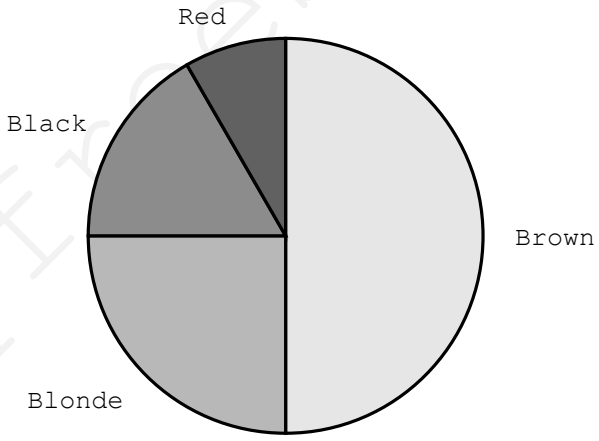
Q16. A rectangle has a perimeter of 36 cm and a width of 7 cm. What is its length?

A. 9 cm B. 11 cm C. 13 cm D. 18 cm E. 29 cm

Q17. A 1.5 litre bottle of lemonade is shared equally between 6 glasses. How much is in each glass?

A. 150 ml B. 200 ml C. 250 ml D. 300 ml E. 900 ml

Q18. The pie chart shows the hair colour of 36 pupils, and the brown sector fills exactly half the circle. How many pupils have brown hair?



A. 12 B. 18 C. 24 D. 27 E. 30

Q19. What is 3 × 4 × 5?

A. 12 B. 20 C. 45 D. 60 E. 120

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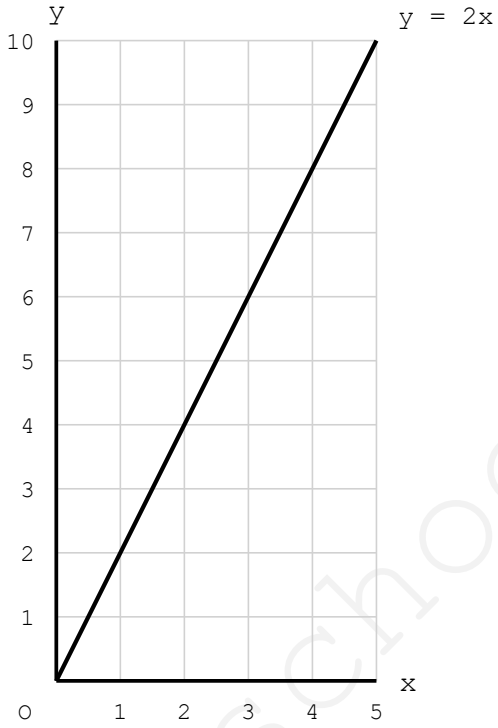
Q20. Use the line y = 2x on the grid. For which value of x is y equal to 6?



A. 1 B. 2 C. 3 D. 6 E. 12

Q21. Two bells ring together at 12 noon. One rings every 15 minutes and the other every 20 minutes. At what time do they next ring together?

A. 12:35 pm B. 12:45 pm C. 1:00 pm D. 1:30 pm E. 5:00 pm

Q22. In one week the lowest temperature recorded was −8°C and the highest was 5°C. What is the range?

A. 3 B. 5 C. 8 D. 13 E. 40

Q23. What is the size of each exterior angle of a regular octagon?

A. 45° B. 60° C. 72° D. 90° E. 135°

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Q24. Write 0.36 as a fraction in its simplest form.

A. 1/36 B. 9/25 C. 3/5 D. 18/25 E. 36/10

Q25. What is double 175?

A. 250 B. 340 C. 345 D. 350 E. 375

Q26. A cuboid has a volume of 210 cm^3 and a base measuring 7 cm by 5 cm. What is its height?

A. 3 cm B. 5 cm C. 6 cm D. 7 cm E. 8 cm

Q27. Which of these is the smallest amount of liquid?

A. 0.38 l B. 0.4 l C. 420 ml D. 450 ml E. 500 ml

Q28. If x = 5 and y = 3, what is the value of 2x + 3y?

A. 16 B. 17 C. 19 D. 21 E. 25

Q29. A car travels 96 km in 1 hour 20 minutes. What is its average speed?

A. 64 km/h B. 70 km/h C. 72 km/h D. 76 km/h E. 80 km/h

Q30. The length and width of a rectangle are in the ratio 5 : 2. The perimeter is 70 cm. What is the length?

A. 10 cm B. 14 cm C. 20 cm D. 25 cm E. 35 cm

Q31. In the number 5,283.916, which digit is in the thousandths place?

A. 5 B. 9 C. 1 D. 6 E. 3

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Q32. Which of these events is the most likely?

A. Rolling a 5 on a fair six-sided dice

B. Taking a red counter from a bag of 3 red and 7 blue counters

C. Picking a vowel from the letters of the word MATHS

D. Choosing a Monday from the seven days of the week

E. Flipping a head on a fair coin

Q33. Estimate 42.8 × 5.1 by rounding each number to the nearest whole number.

A. 200 B. 210 C. 215 D. 218.28 E. 220

Q34. Ben saves £2.50 each week. How many weeks will it take him to save enough for a £45 game?

A. 15 B. 16 C. 18 D. 20 E. 22

Q35. Look at the calendar. What is the date of the fourth Friday?

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

A. 21 B. 23 C. 26 D. 28 E. 30

Q36. What is the nth term rule for this sequence?

12, 19, 26, 33

A. 7n + 5 B. 7n − 5 C. 5n + 7 D. n + 7 E. 7n + 12

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Q37. Six numbers have a mean of 10. Five of them are 7, 9, 11, 12 and 13. What is the range of all six numbers?

A. 6 B. 7 C. 8 D. 11 E. 13

Q38. A : B = 4 : 5 and B : C = 10 : 9. What is A : C in its simplest form?

A. 4 : 9 B. 8 : 9 C. 9 : 8 D. 2 : 3 E. 5 : 9

Q39. A train travels at 60 km/h for the first 2 hours of a journey and at 90 km/h for the last hour. What is its average speed for the whole journey?

A. 65 km/h B. 70 km/h C. 75 km/h D. 80 km/h E. 150 km/h

Q40. A field holds only chickens and rabbits. There are 35 heads and 94 feet altogether. How many rabbits are there?

A. 9 B. 12 C. 15 D. 20 E. 23

Q41. Calculate: 4,000,000 divided by 8,000.

A. 500 B. 50 C. 5000 D. 0.5 E. 5

Q42. What is $3 \times (14 + 6)$?

A. 42 B. 48 C. 54 D. 60 E. 66

Q43. Round 0.999 to 2 significant figures.

A. 0.9 B. 0.99 C. 0.999 D. 1.0 E. 1.1

Q44. A rectangle has a length twice its width and an area of 72 cm^2. What is its perimeter?

A. 24 cm B. 30 cm C. 36 cm D. 42 cm E. 48 cm

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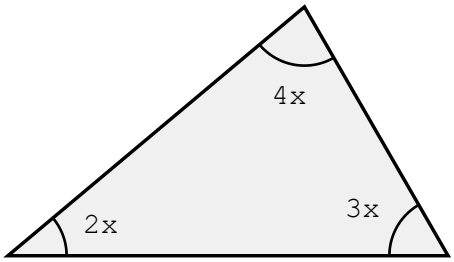
Q45. A machine part weighs 0.45 tonnes. How many kilograms is this?

A. 4.5 kg B. 45 kg C. 450 kg D. 4,500 kg E. 45,000 kg

Q46. Work out the size of the smallest angle in this triangle.



A. 20° B. 40° C. 60° D. 80° E. 90°

Q47. On the graph of y = 4x, the value of x is doubled from 3 to 6. What happens to y?

A. It goes up by 4

B. It doubles as well

C. It stays the same

D. It goes up by 2

E. It is halved

Q48. What is 5/6 of 3/10 of 120?

A. 24 B. 27 C. 30 D. 32 E. 36

Q49. A sequence begins −5, −1, 3, 7, ... Which is the first term greater than 20?

A. 6th B. 7th C. 8th D. 9th E. 10th

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Q50. A gardener plants 60 tulips and 48 roses in rows. Every row has the same number of tulips and the same number of roses, using all the flowers. What is the greatest number of rows?

A. 6 B. 8 C. 10 D. 12 E. 15

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