Maths Mock Test Paper 1

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. What is 'three tenths and four thousandths' written as a decimal?

A. 0.034 B. 0.304 C. 0.34 D. 3.04 E. 3.4

Q2. Work out 6 × 7 + 6 × 3.

A. 18 B. 51 C. 60 D. 66 E. 126

Q3. A box holds 20 chocolates and 15 of them are milk chocolate. What percentage of the box is milk chocolate?

A. 20% B. 25% C. 37.5% D. 60% E. 75%

Q4. Which of these numbers divides exactly by 9?

A. 126 B. 134 C. 148 D. 152 E. 164

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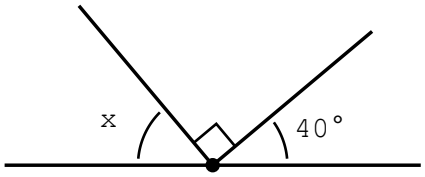
Q5. Three angles fit together along a straight line, as shown. What is the size of angle x?

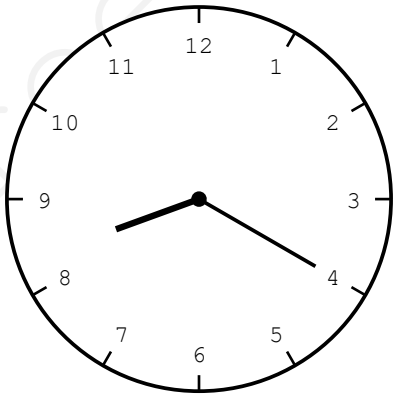


A. 50° B. 60° C. 90° D. 130° E. 140°

Q6. A parcel can only be sent at the cheap rate if it weighs less than 1 kg. Which of these parcels is too heavy for the cheap rate?

A. 45 g B. 450 g C. 0.5 kg D. 0.9 kg E. 1,200 g

Q7. The clock shows the time now. How many minutes is it until 9 o'clock?



A. 20 minutes

B. 30 minutes

C. 40 minutes

D. 50 minutes

E. 1 hour 20 minutes

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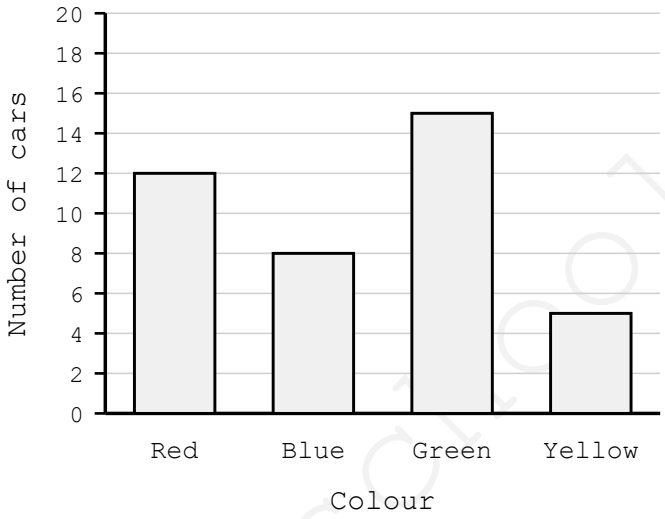
Q8. How many whole numbers lie between −3 and 2?

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

Q9. The bar chart shows the colours of the cars in a car park. How many more green cars than blue cars are there?



A. 7 B. 8 C. 15 D. 20 E. 23

Q10. Which of these is the best estimate for 302 × 49?

A. 1,500 B. 3,000 C. 9,000 D. 12,000 E. 15,000

Q11. Here is a sequence: 5, 11, 17, 23, ... Which expression gives the nth term?

A. n + 6 B. 5n + 6 C. 6n D. 6n + 5 E. 6n − 1

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Q12. The rectangle below has an area of 60 cm². Work out its perimeter.



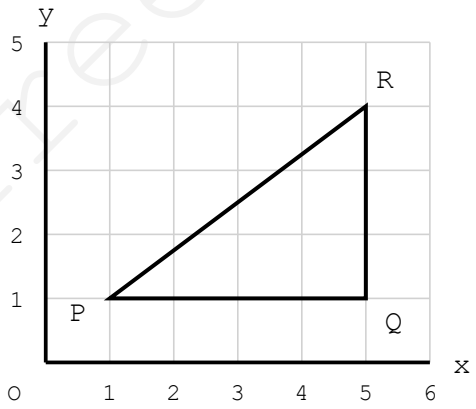
12 cm

A. 17 cm B. 22 cm C. 34 cm D. 48 cm E. 60 cm

Q13. A map is drawn to a scale of 1 cm to 5 km. Two towns are 7.5 cm apart on the map. How far apart are they really?

A. 12.5 km B. 15 km C. 30 km D. 37.5 km E. 75 km

Q14. The triangle PQR is drawn on the grid. What is its area?



A. 5 square units

B. 6 square units

C. 7 square units

D. 12 square units

E. 20 square units

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Q15. Which of these comes to exactly 16?

A. 0.35 × 40 B. 1/4 of 60 C. 30% of 55 D. 20% of 80 E. 2/5 of 45

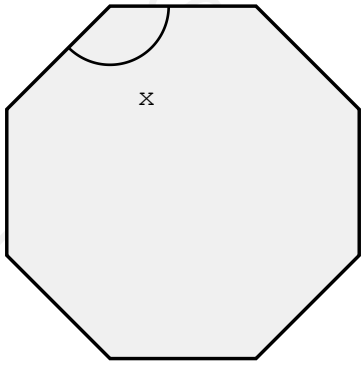
Q16. A lorry covers 150 km in 2 hours 30 minutes. It then drives for one more hour at the same steady speed. How far has it travelled altogether?

A. 180 km B. 195 km C. 210 km D. 225 km E. 240 km

Q17. Ben buys 3 pens and 2 rubbers for £2.40. One pen costs 60p. What does one rubber cost?

A. 25p B. 30p C. 35p D. 40p E. 60p

Q18. The shape below is a regular octagon. What is the size of each of its interior angles?



A. 45° B. 108° C. 120° D. 135° E. 144°

Q19. A gardener has 24 roses and 36 tulips. She makes identical bunches, using every flower. What is the greatest number of bunches she can make?

A. 2 B. 4 C. 6 D. 8 E. 12

Q20. Work out 5 + 3 × (8 − 4).

A. 12 B. 17 C. 20 D. 24 E. 32

Q21. A dripping tap loses 3 ml of water every minute. How much water does it lose in one whole day?

A. 0.432 litres

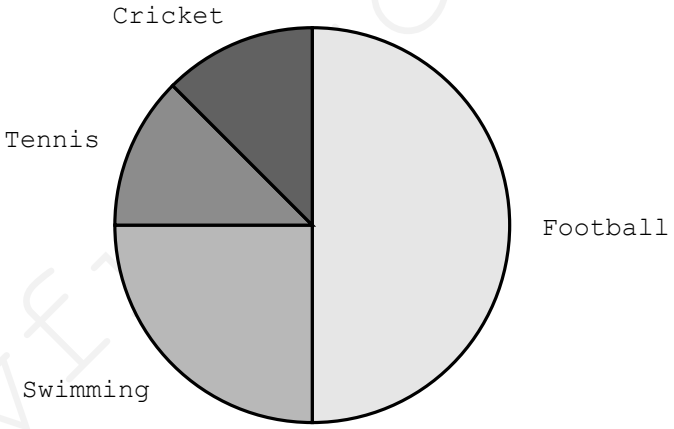
B. 4.32 litres

C. 43.2 litres

D. 432 litres

E. 4,320 litres

Q22. The pie chart shows the favourite sport of 24 pupils. How many of them chose swimming?



A. 6 B. 8 C. 12 D. 18 E. 24

Q23. A submarine is 45 m below sea level. It rises 12 m and then dives 20 m. Where is it now?

A. 13 m below sea level

B. 37 m below sea level

C. 53 m below sea level

D. 65 m below sea level

E. 77 m below sea level

Q24. Solve $5x - 7 = 28$.

A. 3 B. 4 C. 5 D. 6 E. 7

Q25. In the number 5,382 the digits 3 and 8 are swapped round. By how much does the number go up?

A. 45 B. 450 C. 495 D. 500 E. 4,500

Q26. The timetable shows three buses. How many minutes longer does Bus C take to travel from Hillside to the Station than Bus A takes?

Stop	Bus A	Bus B	Bus C
Hillside	07:45	08:20	09:05
Market Square	08:02	08:37	09:24
Library	08:19	08:54	09:43
Station	08:40	09:15	10:05

A. 5 minutes

B. 10 minutes

C. 15 minutes

D. 25 minutes

E. 60 minutes

Q27. A square and a rectangle have the same perimeter. The rectangle measures 10 cm by 6 cm. What is the area of the square?

A. 16 cm^2 B. 36 cm^2 C. 60 cm^2 D. 64 cm^2 E. 81 cm^2

Q28. A school needs 250 exercise books. They are sold only in packs of 12. What is the smallest number of packs the school can order?

A. 18 B. 19 C. 20 D. 21 E. 22

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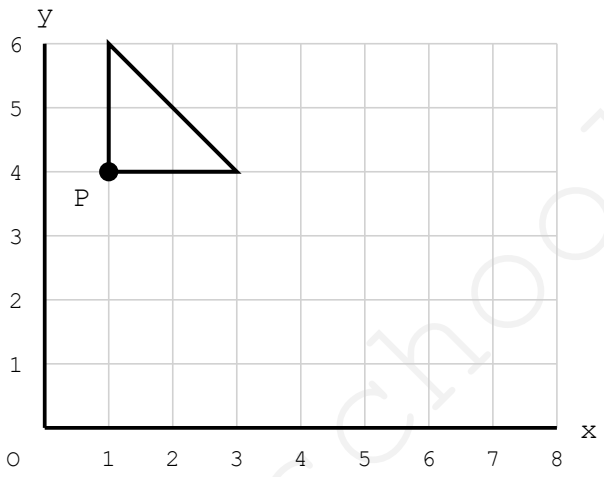
Q29. Some money is shared between Amy and Ben in the ratio 5 : 3. Amy gets £16 more than Ben. How much does Amy get?

A. £16 B. £24 C. £30 D. £32 E. £40

Q30. The triangle drawn on the grid is moved 3 squares right and 2 squares down. Where does the corner marked P end up?



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

Q31. Which of these fractions is equal to 0.16?

A. 1/6 B. 1/16 C. 3/16 D. 4/25 E. 2/13

Q32. A crowd of 8,463 people is reported in a newspaper as 'about 8,000'. What has the number been rounded to?

A. the nearest 10

B. the nearest 100

C. the nearest 500

D. the nearest 1,000

E. the nearest 10,000

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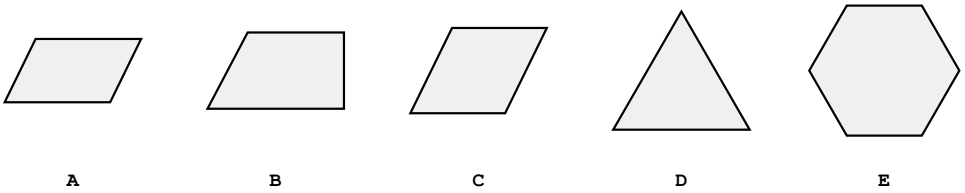
Q33. Which of these shapes has exactly two right angles?



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

Q34. It takes Sam 24 minutes to walk the 2 km to school. What is his average walking speed?

A. 1 km/h B. 2 km/h C. 3 km/h D. 4 km/h E. 5 km/h

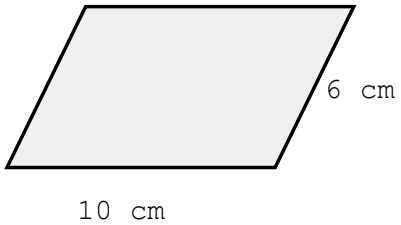
Q35. Work out 25 × 36.

A. 600 B. 700 C. 750 D. 850 E. 900

Q36. The first four terms of a sequence are 2, 6, 12, 20. What is the 8th term?

A. 72 B. 90 C. 110 D. 132 E. 156

Q37. The parallelogram below has a base of 10 cm and a slanting side of 6 cm. Its perpendicular height is 4 cm. What is its area?



A. 40 cm² B. 48 cm² C. 60 cm² D. 64 cm² E. 100 cm²

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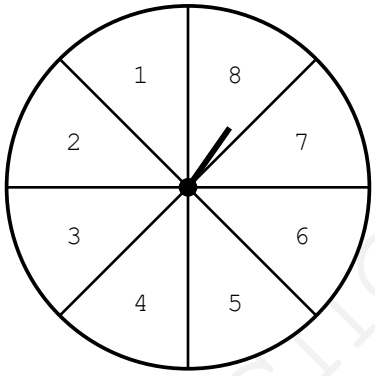
Q38. A bag of 40 sweets is shared between three children. Ben gets twice as many as Ali, and Cara gets 4 more than Ali. How many sweets does Cara get?

A. 9 B. 11 C. 13 D. 18 E. 22

Q39. The spinner is divided into eight equal sections. What is the probability that it lands on a factor of 12?



A. 3/8 B. 1/2 C. 5/8 D. 2/3 E. 3/4

Q40. A shop puts the price of a bike up by 20%, then in a sale takes 20% off the new price. The bike now costs £192. What was its price before the rise?

A. £180 B. £192 C. £200 D. £240 E. £250

Q41. N is a two-digit multiple of 7 and its two digits add up to 11. What is N?

A. 29 B. 38 C. 47 D. 56 E. 65

Q42. A box holds red and blue pens in the ratio 2 : 7, and there are 45 pens altogether. How many red pens must be added so that there are as many red pens as blue ones?

A. 25 B. 30 C. 35 D. 45 E. 50

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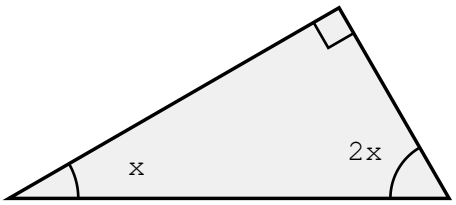
Q43. In this right-angled triangle the angle marked 2x is twice the angle marked x. Work out the size of angle x.

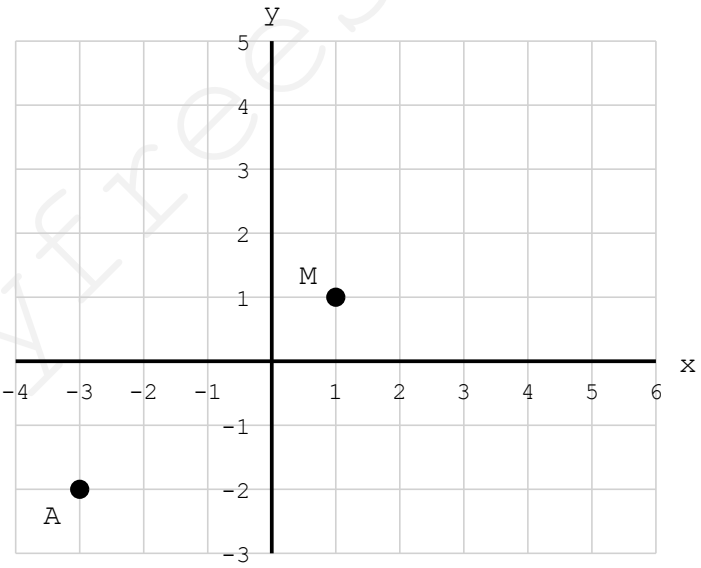


A. 20° B. 30° C. 45° D. 60° E. 90°

Q44. Work out (−6) × 4 − (−9).

A. −33 B. −24 C. −15 D. 15 E. 33

Q45. M is the midpoint of the straight line AB. A and M are marked on the grid. What are the coordinates of B?



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

Q46. A rectangular field measures 40 m by 25 m. One hectare is 10,000 m². What is the area of the field in hectares?

A. 0.0001 ha B. 0.001 ha C. 0.01 ha D. 0.1 ha E. 1 ha

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Q47. A train leaves at 14:35 and arrives at 17:05, but it stands still at a station for 30 minutes on the way. It covers 130 km. What is its average speed while it is actually moving?

A. 52 km/h B. 55 km/h C. 56 km/h D. 60 km/h E. 65 km/h

Q48. A taxi charges £3 to start with, then £1.40 for every mile travelled. One journey costs £17. How many miles was it?

A. 8 B. 10 C. 12 D. 14 E. 20

Q49. Tom thinks of a number. He doubles it, subtracts 7 and then divides the result by 3. His answer is 5. What number did he think of?

A. 9 B. 11 C. 13 D. 16 E. 22

Q50. A cube measuring 4 cm along each edge is painted all over on the outside, then cut into 1 cm cubes. How many of the small cubes have no paint on them at all?

A. 8 B. 16 C. 24 D. 36 E. 56

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