Maths Mock Test Paper 30

Name: _____ Date: _____

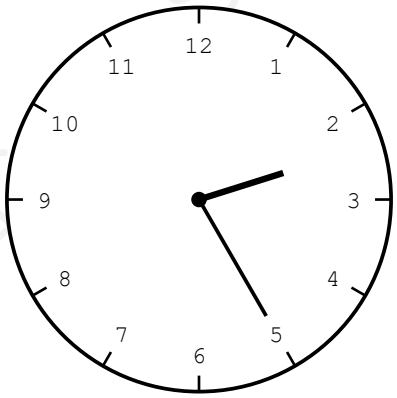
Time allowed: **50 minutes** **50 questions**, 1 mark each

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 digits of 6,052 are rearranged to make the largest possible even number. What is that number?

A. 6,205 *B.* 6,502 *C.* 6,250 *D.* 5,620 *E.* 6,520

Q2. The minute hand of this clock goes round exactly one and a half times. What time does the clock show then?



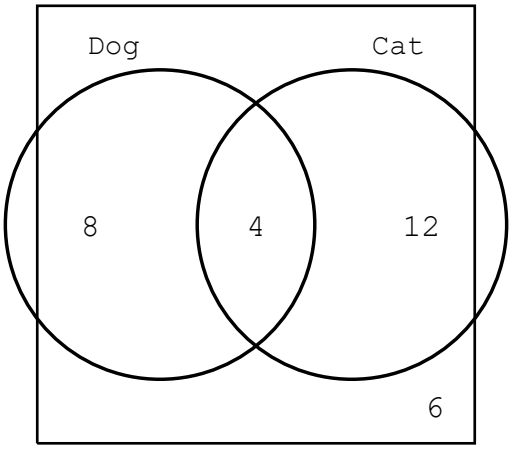
A. 3:25 *B.* 2:55 *C.* 3:55 *D.* 4:25 *E.* 3:40

Q3. Which of these fractions is closest to 1?

A. 9/10 *B.* 3/4 *C.* 5/6 *D.* 7/8 *E.* 2/3

myfreeschool

Q4. The Venn diagram shows which pets 30 pupils have. How many of the pupils have a dog?



A. 8 *B.* 24 *C.* 16 *D.* 4 *E.* 12

Q5. In a shopping centre, the car parks are floors −1, −2 and −3. A lift starts at floor −2, goes up 7 floors and then down 9 floors. On which floor does it stop?

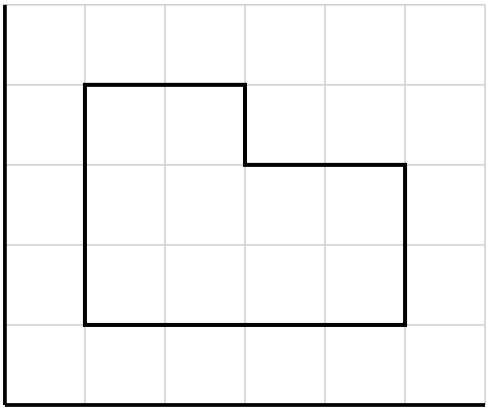
A. −18 *B.* 4 *C.* 0 *D.* −4 *E.* −3

Q6. Which of these is the most sensible estimate of how much liquid a teaspoon holds?

A. 5 ml *B.* 50 ml *C.* 500 ml *D.* 5 litres *E.* 0.05 ml

myfreeschool

Q7. How many more squares must be added to this shape to turn it into a complete rectangle, 4 squares wide and 3 squares tall?

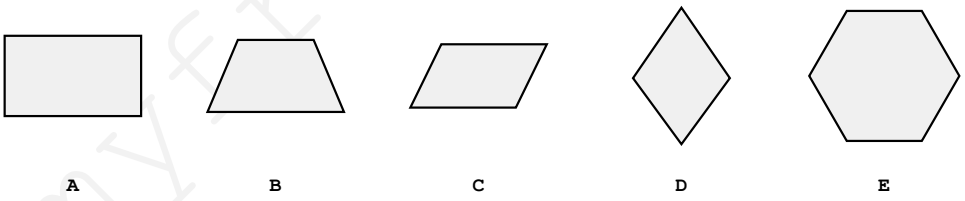


A. 1 *B.* 2 *C.* 3 *D.* 4 *E.* 10

Q8. Which of these is the same as n + n + n + 5?

A. 3n + 5 *B.* 8n *C.* n + 8 *D.* 3n + 5n *E.* 4n + 5

Q9. Which of these shapes has no parallel sides at all?



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

Q10. Pencils cost 35p each. Max buys as many as he can with £2. How much change does he get?

A. 15p *B.* 5p *C.* 25p *D.* 35p *E.* 10p

myfreeschool

Q11. The table shows the crowd at five football grounds. Which two crowds are the same when they are rounded to the nearest thousand?

Ground	Crowd
Ash	12,480
Birch	12,510
Cedar	11,490
Dale	13,549
Elm	13,499

A. Ash and Birch

B. Ash and Cedar

C. Dale and Elm

D. Birch and Elm

E. Birch and Dale

Q12. What number is 5 thousands, 3 tenths and 4 hundredths?

A. 5,000.43 *B.* 5,000.34 *C.* 5.34 *D.* 5,034 *E.* 50.34

Q13. Which list is in order, from smallest to largest?

A. 0.7, 72%, 3/4

B. 72%, 0.7, 3/4

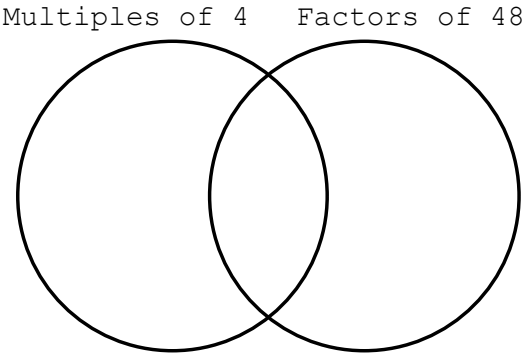
C. 3/4, 72%, 0.7

D. 0.7, 3/4, 72%

E. 72%, 3/4, 0.7

myfreeschool

Q14. A number is to be written in the overlap of this Venn diagram, where the two circles cross. Which of these could it be?



A. 6 *B.* 3 *C.* 18 *D.* 20 *E.* 16

Q15. Sita works out 39 × 6 by first doing 40 × 6. What must she do next?

A. subtract 1

B. subtract 6

C. add 6

D. subtract 39

E. add 1

Q16. A bank account that is £35 overdrawn shows a balance of −£35. The owner of this account pays in £50 and then spends £28. What does the balance show now?

A. −£43 *B.* £13 *C.* −£13 *D.* £43 *E.* −£113

myfreeschool

Q17. Tiles are laid in a growing pattern, as the table shows. Which pattern uses exactly 53 tiles?

Pattern	1	2	3	4
Tiles	5	8	11	14

A. Pattern 17

B. Pattern 16

C. Pattern 15

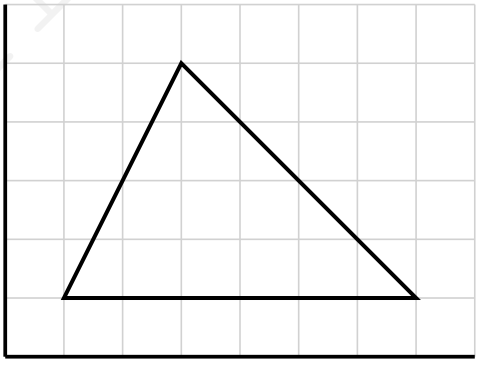
D. Pattern 18

E. Pattern 51

Q18. A 2 litre bottle of squash fills 8 identical glasses, with 80 ml left over. How much does each glass hold?

A. 250 ml *B.* 240 ml *C.* 260 ml *D.* 230 ml *E.* 160 ml

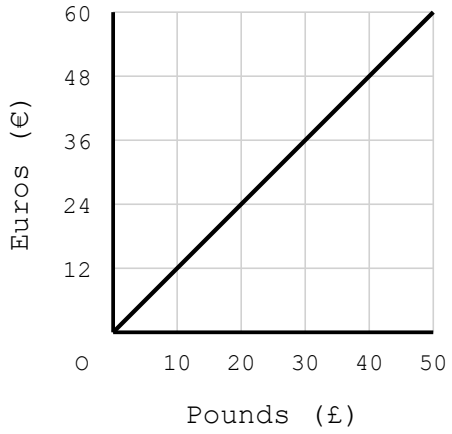
Q19. Each square on the grid is 1 cm wide. A rectangle has the same base as this triangle, and the same area. How tall is the rectangle?



A. 3 cm *B.* 4 cm *C.* 2 cm *D.* 6 cm *E.* 12 cm

myfreeschool

Q20. This graph changes pounds into euros, but it stops at £50. Use it to work out how many euros are the same as £150.



A. €120 *B.* €150 *C.* €160 *D.* €210 *E.* €180

Q21. Mo drives at 40 mph for half an hour, then at 60 mph for half an hour. How far does he drive altogether?

A. 60 miles *B.* 100 miles *C.* 25 miles *D.* 50 miles *E.* 20 miles

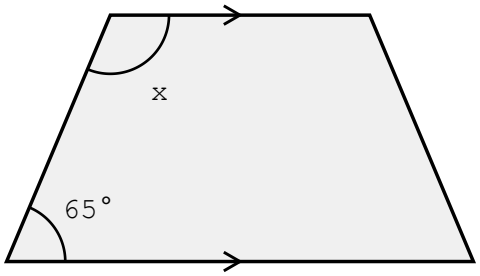
Q22. The table shows ticket prices at a cinema. What is the least that 2 adults and 3 children can pay?

Ticket	**Price**
Adult	£8
Child	£5
Family (2 adults, 2 children)	£22

A. £31 *B.* £22 *C.* £27 *D.* £30 *E.* £29

myfreeschool

Q23. This shape is a trapezium, with its top and bottom sides parallel. What is the size of angle x?



A. 115° *B.* 25° *C.* 65° *D.* 125° *E.* 105°

Q24. A bus leaves at 07:10, and then one leaves every 25 minutes. Lily reaches the stop at 09:00. What time was the last bus she missed?

A. 08:35 *B.* 09:15 *C.* 08:45 *D.* 08:50 *E.* 08:25

Q25. The table shows how many brothers and sisters each child in a class has. How many brothers and sisters do they have altogether?

Brothers and sisters	Number of children
0	4
1	9
2	5
3	2

A. 20 *B.* 25 *C.* 6 *D.* 19 *E.* 30

Q26. How many of the whole numbers from 100 to 200 have at least one digit 7?

A. 10 *B.* 11 *C.* 20 *D.* 19 *E.* 21

myfreeschool

Q27. A price goes up by 10%, and the new price then goes down by 10%. How does the final price compare with the starting price?

A. It is the same

B. It is 20% lower

C. It is 1% higher

D. It is 10% lower

E. It is 1% lower

Q28. How many of the whole numbers from 1 to 50 have an odd number of factors?

A. 5 *B.* 6 *C.* 8 *D.* 7 *E.* 25

Q29. A number with one decimal place rounds to 8 when it is rounded to the nearest whole number. What is the difference between the largest and the smallest number it could be?

A. 0.9 *B.* 1 *C.* 0.5 *D.* 0.8 *E.* 1.4

Q30. All the whole numbers from 1 to 20 are multiplied together. How many zeros are there at the end of the answer?

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

Q31. The temperature fell steadily through one evening. It was 7 °C at 18:00 and −8 °C at 23:00. What was the temperature at 21:00?

A. −3 °C *B.* −1 °C *C.* −2 °C *D.* 1 °C *E.* −5 °C

Q32. Four odd numbers in a row, such as 3, 5, 7 and 9, add up to 64. What is the largest of the four?

A. 15 *B.* 19 *C.* 16 *D.* 17 *E.* 21

Q33. A pile of 500 sheets of paper is 4.5 cm high. How thick is one sheet?

A. 0.45 mm *B.* 0.9 mm *C.* 0.009 mm *D.* 9 mm *E.* 0.09 mm

Q34. Each side of a square is made 50% longer. By what percentage does its area go up?

A. 50% *B.* 100% *C.* 125% *D.* 150% *E.* 225%

Q35. The ages of Ali and Ben are in the ratio 2 : 3. In 5 years' time, their ages will be in the ratio 3 : 4. How old is Ben now?

A. 10 *B.* 15 *C.* 12 *D.* 20 *E.* 25

Q36. A train 200 m long travels at 20 metres per second through a tunnel 400 m long. How long is it from the moment the front enters the tunnel until the back comes out?

A. 10 seconds

B. 20 seconds

C. 40 seconds

D. 30 seconds

E. 15 seconds

Q37. In a netball league of 6 teams, every team plays every other team twice, once at home and once away. How many matches are played altogether?

A. 15 *B.* 36 *C.* 30 *D.* 12 *E.* 25

Q38. A robot walks round the outside of a regular polygon. At each corner it turns through 24°. How many sides does the polygon have?

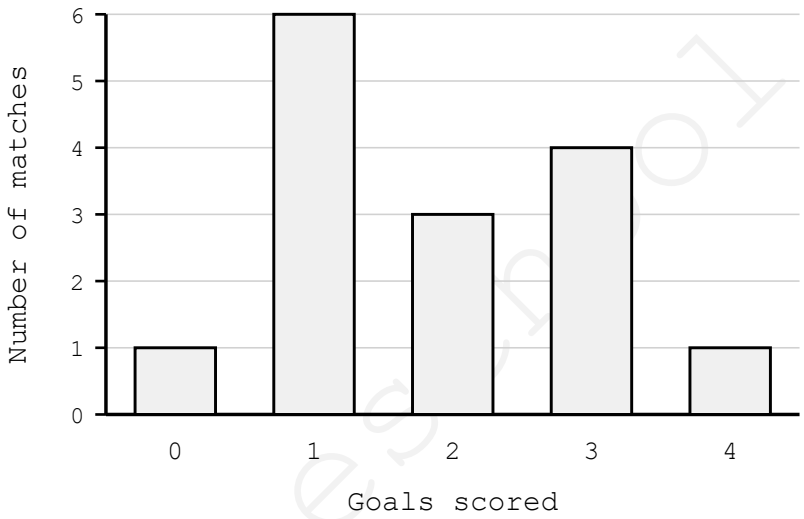
A. 24 *B.* 12 *C.* 18 *D.* 15 *E.* 20

myfreeschool

Q39. A plane leaves London at 09:30 and the flight lasts 7 hours 20 minutes. New York time is 5 hours behind London time. What is the time in New York when the plane lands?

A. 11:30 *B.* 21:50 *C.* 16:50 *D.* 12:10 *E.* 11:50

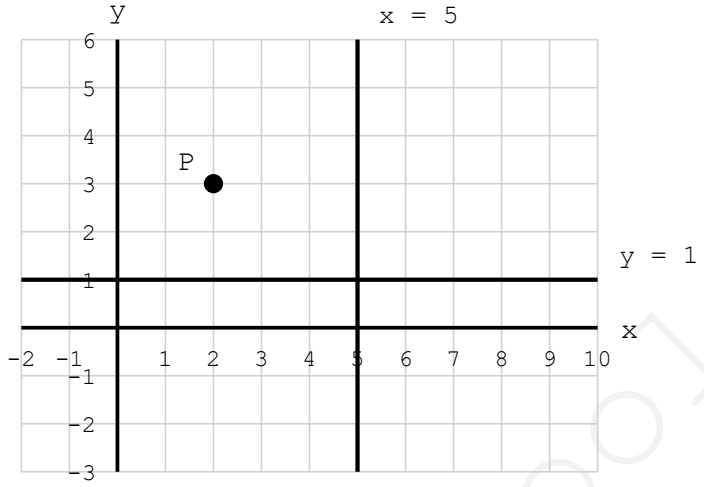
Q40. A team played 15 matches. The bar chart shows how many matches it scored each number of goals in. What was the median number of goals?



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

myfreeschool

Q41. Point P is reflected in the line x = 5. The new point is then reflected in the line y = 1. What are the coordinates of the final point?



A. (8, −1) *B.* (8, 3) *C.* (2, −1) *D.* (−1, 8) *E.* (7, −1)

Q42. 1 is added to the top and to the bottom of a fraction, and the new fraction is equal to 1/2. Which of these was the first fraction?

A. 1/4 *B.* 3/7 *C.* 2/7 *D.* 4/7 *E.* 3/8

Q43. What is the smallest whole number greater than 1 that leaves a remainder of 1 when it is divided by 2, by 3, by 4, by 5 and by 6?

A. 31 *B.* 121 *C.* 61 *D.* 59 *E.* 41

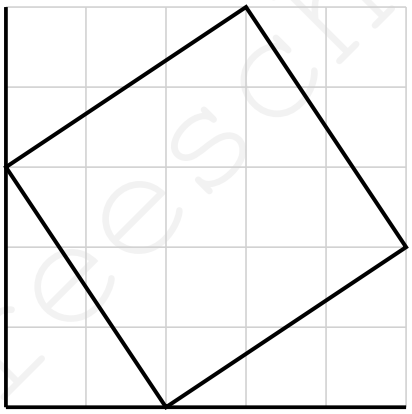
myfreeschool

Q44. In this table, each letter stands for a different number, and the last column gives the total of each row. What number does C stand for?

			Total
A	A	B	14
A	B	B	19
B	C	C	20

A. 3 *B.* 4 *C.* 5 *D.* 6 *E.* 8

Q45. Each square on the grid has an area of 1 cm². What is the area of the tilted square?



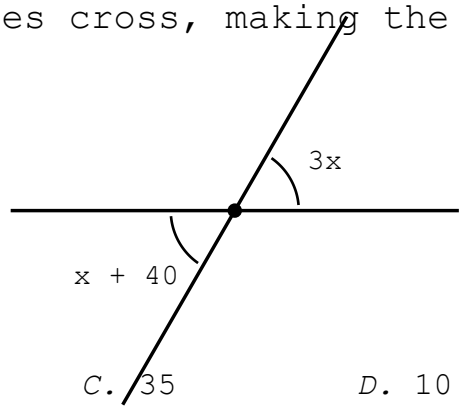
A. 13 cm² *B.* 25 cm² *C.* 12 cm² *D.* 16 cm² *E.* 9 cm²

Q46. Three gear wheels touch in a row. A has 36 teeth, B has 24 teeth and C has 8 teeth. A turns round exactly 2 times. How many times does C turn?

A. 3 *B.* 9 *C.* 6 *D.* 12 *E.* 18

myfreeschool

Q47. Two straight lines cross, making the angles shown. What is the value of x?



A. 40 *B.* 60 *C.* 35 *D.* 10 *E.* 20

Q48. A bag holds 12 counters, and the probability of taking a red one is 1/3. How many more red counters must be added to make the probability of taking a red one 1/2?

A. 2 *B.* 3 *C.* 4 *D.* 6 *E.* 8

Q49. The digits of a two-digit number add up to 9. When the digits are swapped, the number goes down by 27. What is the number?

A. 72 *B.* 63 *C.* 54 *D.* 81 *E.* 36

Q50. A large cube is made from 64 small cubes, 4 along each edge. The outside of the large cube is painted. How many small cubes have paint on exactly two faces?

A. 8 *B.* 12 *C.* 16 *D.* 36 *E.* 24

myfreeschool