

Assessment Test 2

Allow 60 minutes to do this test. Work as quickly and as carefully as you can.

You can print **multiple-choice answer sheets** for these questions from our website
go to cgpbooks.co.uk/11plus/answer-sheets or scan the QR code on the right.

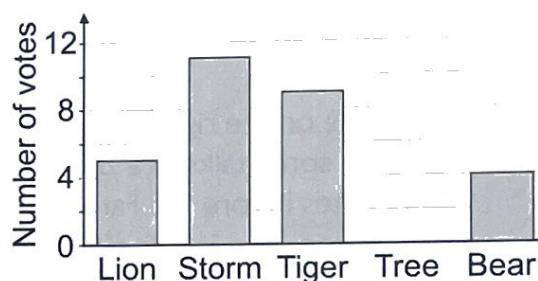
If you'd prefer to answer them in standard write-in format, either write your answers
in the spaces provided or circle the **correct answer** from the options **A to E**.



1. A baker is making a cake. He uses 1.34 kg of sugar, 445 g of raisins, 1.06 kg of flour and 847 g of carrots. What is the total weight of all these ingredients in grams? Answer: _____ g

2. A ruler led their country from the year CMXII until CMLXV. How many years did they rule for?
A 53 **B** 43 **C** 63 **D** 57 **E** 67

3. A class of children voted to pick their new mascot. The results are shown in this bar chart, but the bar representing the tree is missing. In total, there were four more votes for animals than for non-animals. How many votes were for the tree?



Answer: _____

4. Which of these numbers is not a factor of 540?

A 20 **B** 30 **C** 40 **D** 60 **E** 90

5. The table shows the number of bags sold by a shop in a day. What fraction of the backpacks sold were green?

A $\frac{5}{8}$ **C** $\frac{4}{9}$ **E** $\frac{1}{3}$
B $\frac{1}{4}$ **D** $\frac{7}{18}$

	Backpack	Shoulder bag
Yellow		
Green		

6. One bus ticket costs £3.65. How much do 58 tickets cost? Answer: £ _____

7. There are 3875 people in a stadium. The same number of people are sitting in each of the stadium's 25 sections. $\frac{1}{5}$ of the people in each section are sitting in the front two rows. How many people are in the front two rows in each section? Answer: _____

8. Jessie tried to record the temperature at 12 pm every day for 6 days. Her results are in this table.

Day	1	2	3	4	5	6
Temperature (°C)	20	15	21	18	16	17

Jessie took the temperature reading at the wrong time on one of the days, so she didn't use that temperature when calculating the mean midday temperature of 18 °C.

Which temperature didn't she use?

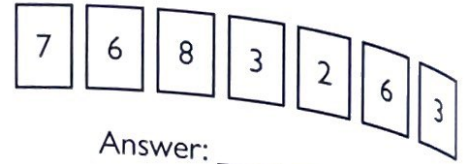
A 20 °C **B** 15 °C **C** 21 °C **D** 16 °C **E** 17 °C (/ 8)

Carry on to the next question → →

9. Maya had £8. She bought a magazine for £3.59, three ice lollies for 65p each and a birthday card for £1.29. How much money did she have left after buying those items?

Answer: £ _____

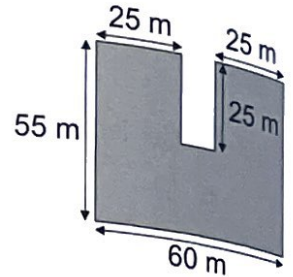
10. What is the difference between the largest and smallest 7-digit numbers that can be made using these digit cards? Each card must be used exactly once in each number.



Answer: _____

11. This diagram shows a field. Jack is putting a wire fence around its perimeter. Wire fence comes in rolls of 50 m. How many rolls of wire fence does he have to buy to fence the entire field?

- A** 3 rolls **C** 5 rolls **E** 7 rolls
B 4 rolls **D** 6 rolls



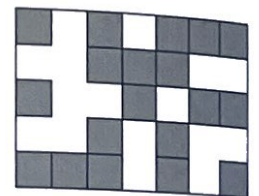
12. The table on the right shows the start and finish times of some talks at a zoo. Rex arrived at the zoo 25 minutes before the Farm Animals talk finished and left the zoo 30 minutes after the Reptiles talk started. How long was Rex at the zoo for?

	Start	Finish
Birds	1105	1210
Farm Animals	1225	1320
Giraffes	1355	1420
Elephants	1430	1500
Reptiles	1535	1620

Answer: _____ hour(s) _____ minutes

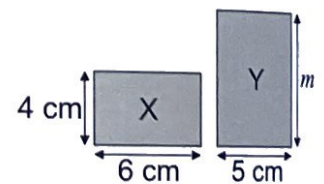
13. Jenny uses identical square tiles to make this design. She removes tiles until the design has a vertical and a horizontal line of symmetry. What is the minimum number of tiles that Jenny could have removed?

- A** 1 **C** 3 **E** 5
B 2 **D** 4



14. Shape X has been enlarged by a scale factor of 1.25 to make shape Y. What is the value of m ?

Answer: _____ cm



15. The total weight of 35 pears is 6.86 kg. What is the average weight per pear in grams?

Answer: _____ g

16. An electrical shop has a sale with 30% off the price of any item. Omar works at the shop, so he gets 20% off the final price that other customers would pay, even during the sale. A TV was originally priced at £450. How much would Omar pay for this TV?

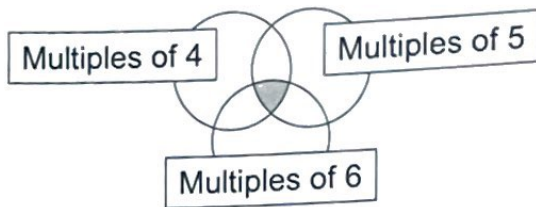
- A** £225 **B** £252 **C** £315 **D** £198 **E** £135

17. A charity shop sells hardback books for £3.50 each and paperback books for £1.20 each. This table shows the shop's sales over one morning. Some of the data is missing. How many non-fiction paperback books did the shop sell that morning?

	Fiction	Non-fiction	Total
Paperback	£14.40		
Hardback		£21	£31.50
Total	£24.90		£56.70

Answer: _____

18. What is the smallest number that can go in the shaded area of the Venn diagram on the right?



Answer: _____

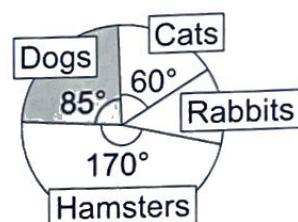
19. A builder can lay 360 bricks a day. She needs to lay 8640 bricks to finish a house. She works 6 days a week. How many weeks will it take her to finish the house?

Answer: _____ weeks

20. How many hours does it take for the hour hand on a clock to move through an angle of 165°?

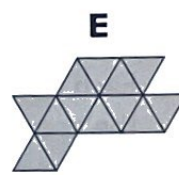
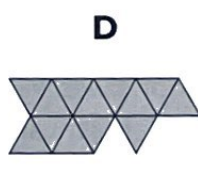
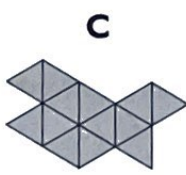
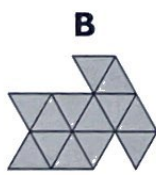
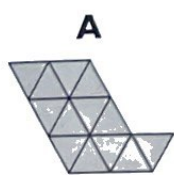
Answer: _____ hours

21. The pie chart shows the numbers of pets the children in class 6Q have. They have 9 rabbits in total. How many dogs do they have?



Answer: _____

22. Belle has the two shapes on the right. They are made from identical triangles. She fits them together to make new shapes without any of the triangles overlapping. Which of the shapes below can she not make?



23. Three children sold some homemade cakes. The pictogram shows how many cakes each child sold. Each cake cost 35p to make and was sold for £1.20. How much profit did they make in total?

Rae	
Taz	
Esmé	

= 12 cakes

- A** £106.00 **C** £127.20 **E** £90.10
B £83.30 **D** £37.10

24. Lauren had £8.40. When she and Tamsin added their money together, the total amount they had was £14, rounded to the nearest pound. What is the minimum amount of money Tamsin could have had?

Answer: £ _____ / 8

Carry on to the next question → →

25. A sequence starts 2, 9, 16, 23, 30...
What is the value of the 100th term?

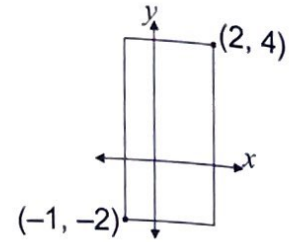
Answer: _____

26. Heidi is doing a sponsored walk. She will raise £1.35 for every half mile she walks.
How much money will Heidi raise if she walks 32 km?
Use the conversion 5 miles = 8 km.

Answer: £ _____

27. The shape on the right is a rectangle.
Which of the points below is on the edge of the rectangle?

- A** (2, -3) **C** (0, 3) **E** (-1, 2)
B (1, -1) **D** (3, -2)



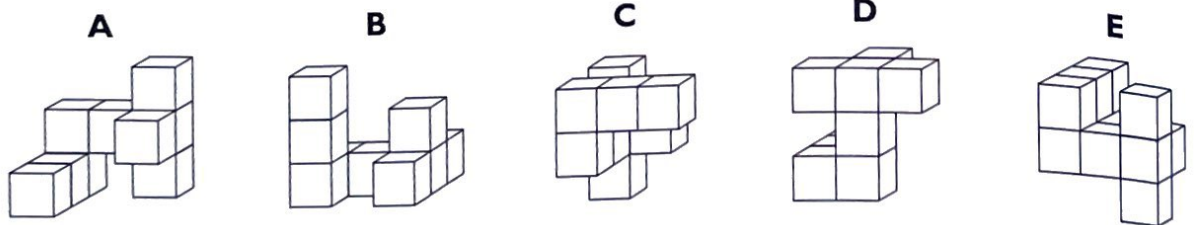
28. Nick has 800 toy bricks. He has 1 large brick for every 6 small bricks,
and he has 2 small bricks for every 1 medium-sized brick.
How many of Nick's bricks are medium-sized?

Answer: _____

29. Which of these calculations does not give the answer 96?

- A** $(9 - 6) \times 4 \times 2^3$ **C** $2^2 \times (17 + 6)$ **E** $12^2 - 3 \times 16$
B $5 \times 3 + 9 \times (8 + 1)$ **D** $18 \div 3 + 9 \times (4 + 6)$

30. Which of these shapes is not identical to the others?



31. Each month, Connor saves $\frac{4}{5}$ as much as he saved in
the previous month. In January he saved £125.
How much did he save in April?

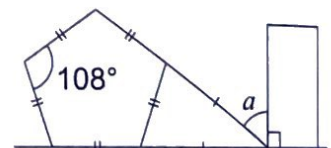
Answer: £ _____

32. Here is an equation: $5^2 - (3 + 5) \times 2 = 3n$
What is the value of n in this equation?

Answer: _____

33. This diagram shows a regular pentagon, an isosceles triangle
and a rectangle on a straight line. What is the size of angle a ?

Answer: _____°



34. A sequence follows the rule 'divide the previous number by 4, then add 24'.
The 5th term in the sequence is 32.5. What is the 2nd term in this sequence?

Answer: _____

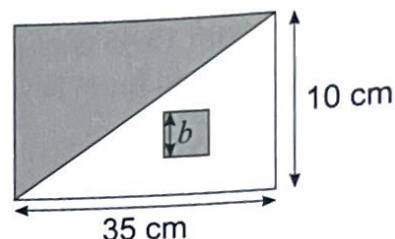
35. A gift shop sold 460 items one morning. $\frac{1}{4}$ of the items sold were rubbers, $\frac{3}{20}$ were pencils and $\frac{1}{5}$ were notebooks. The rest of the items sold were pens. How many pens did the gift shop sell?
- A 92 B 184 C 276 D 230 E 161

36. A coat rail can safely hold 45 kg of clothes. Jumpers each weigh 800 g and coats each weigh 4 kg. 15 jumpers are hung on the rail. What is the maximum number of coats that can now safely be hung on the rail?

Answer: _____

37. The design on the right is made of two triangles and a square. The area of the shaded part of the design is 200 cm^2 . What is the value of b ?

Answer: _____ cm



38. A bucket is filled with 5.6 litres of water. Every minute, 30 ml of water leaks out of the bucket. In litres, how much water is left in the bucket after two and a quarter hours?

Answer: _____ litres

39. The cost in pounds (C) of a gift box is calculated by the formula $C = 2f + 12.5b + 25$, where f is the number of flowers and b is the number of blocks of cheese in the box. How many flowers are in a gift box that has 3 blocks of cheese and costs £70.50?

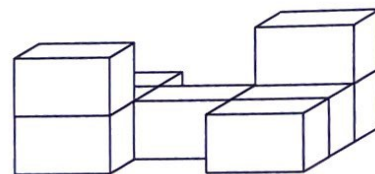
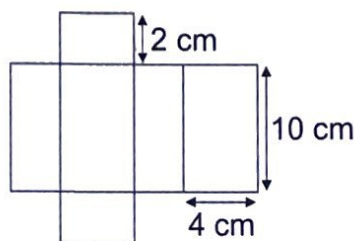
Answer: _____

40. Archie and Sonam are each painting a wall, and the walls are both the same size. After 1 hour, Archie has painted $\frac{7}{25}$ of his wall and Sonam has painted $\frac{3}{5}$ of her wall. What percentage of the total area of the two walls do they have left to paint?

A 44% B 56% C 88% D 12% E 60%

41. Copies of this net have been folded up to make the cuboids in the model on the right. What is the total volume of the model?

Answer: _____ cm^3



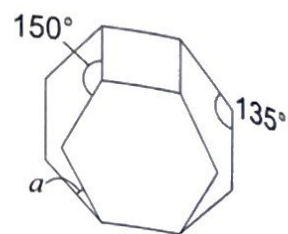
42. A quadrilateral is made by placing squares with a side length of 2 cm together. It has a perimeter of 36 cm. What is the largest area the quadrilateral could have?

Answer: _____ cm^2 (/ 8)

Carry on to the next question → →

43. The diagram on the right shows a regular octagon, a regular hexagon and a rectangle. What is the size of angle a ?

Answer: _____°



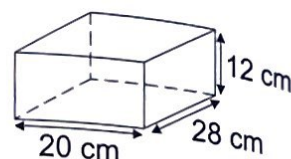
44. Tanya's dog is $3\frac{3}{4}$ times heavier than her cat. Her cat weighs $4\frac{2}{3}$ kg. How heavy is her dog?
A $19\frac{1}{4}$ kg **B** 18 kg **C** $8\frac{5}{12}$ kg **D** $17\frac{1}{2}$ kg **E** 15 kg

45. Every day in July, Finn read from 12:30 to 13:10 and again from 15:45 until 17:35. How long, in minutes, did Finn read for in July?

Answer: _____ minutes

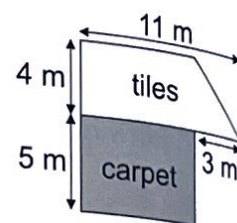
46. Jonah has cubes with edges of length 5 cm. He puts as many of the cubes as possible entirely inside the box shown on the right. How much empty space is left inside the box?

- A** 95 cm^3 **C** 6720 cm^3 **E** 1720 cm^3
B 1420 cm^3 **D** 5000 cm^3



47. Flooring is being installed as shown in the diagram on the right. Tiles cost £20 per square metre and carpet costs £16 per square metre. How much will the floors cost in total?

Answer: £ _____



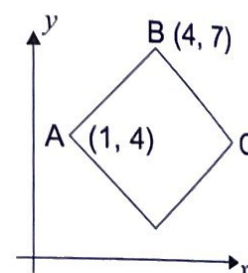
48. $2 \times (32 \boxed{?} 8 + 4^2) = 10 + 5 \times 6$

Which of the following signs makes the calculation above true?

- A** + **B** - **C** × **D** ÷ **E** =

49. Points A and C on the square shown on the right have the same y -coordinate. If the square is reflected in the x -axis, what are the coordinates of point C on the reflected image?

Answer: (_____, _____)



50. A fish tank has a shallow end, which is created by a ledge that is 20 cm high, as shown. $200\,000\text{ cm}^3$ of water is added to the empty tank. How far is the surface of the water from the top of the tank?

Answer: _____ cm

