


Practice Paper 5

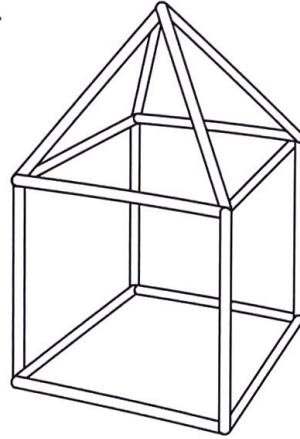
Mathematics

Read the following carefully:

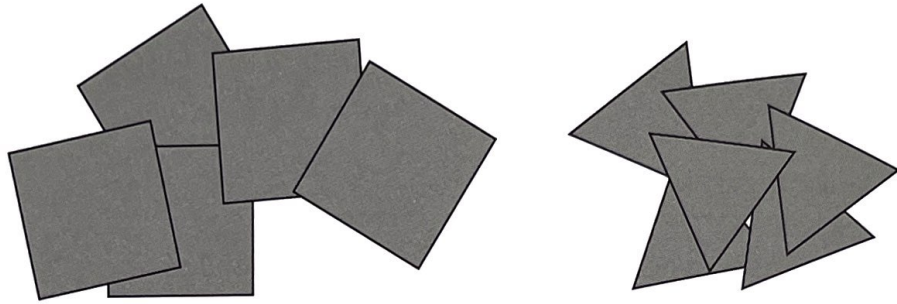
1. **Do not open or turn over the page in this booklet until you are told to do so.**
 2. This is a multiple-choice test in which you have to mark your answer to each question on the separate answer sheet. You should mark only one answer for each question.
 3. Draw a firm line clearly through the rectangle next to your answer like this . If you make a mistake, rub it out as completely as you can and put in your new answer.
 4. Be sure to keep your place on the answer sheet. Mark your answer in the box that has the same number as the question.
 5. You may not be able to finish all the questions, but try to do as many as you can. If you cannot do a question, **do not waste time on it but go on to the next**. If you are not sure of an answer, choose the one you think is best.
 6. You may do any rough working on a separate sheet of paper.
 7. **Work as quickly and as carefully as you can.**
 8. You will have **50 minutes** to do the test.
-

1

Meera made this shape from straws.



She wants to make the same shape from tiles like these.



What tiles does she need?

- A 4 squares and 3 triangles
- B 4 squares and 4 triangles
- C 4 squares and 5 triangles
- D 5 squares and 4 triangles
- E 5 squares and 5 triangles

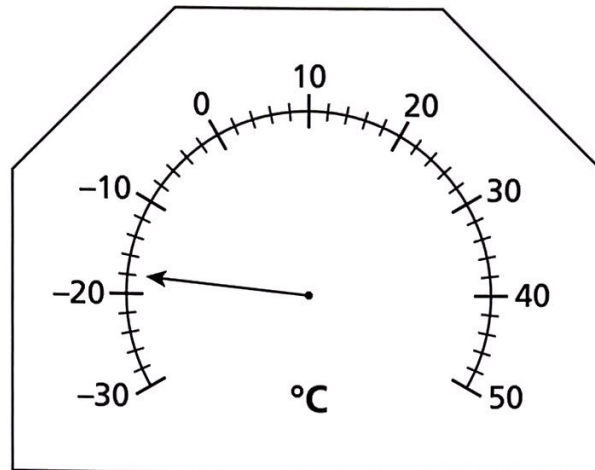
2

Last year, the sales for a shopping centre were nine million, ninety-two thousand and forty-five pounds.

What is this in figures?

- A £9920450
- B £9092045
- C £9009245
- D £9092450
- E £9920045

3



The dial shows the temperature inside a freezer.

What is the temperature in the freezer?

- A** -19°C **B** -22°C **C** -14°C **D** -21°C **E** -18°C
-

4

Hannah made some biscuits for a party.

She put them all out on plates.

Each plate has the same number of biscuits.

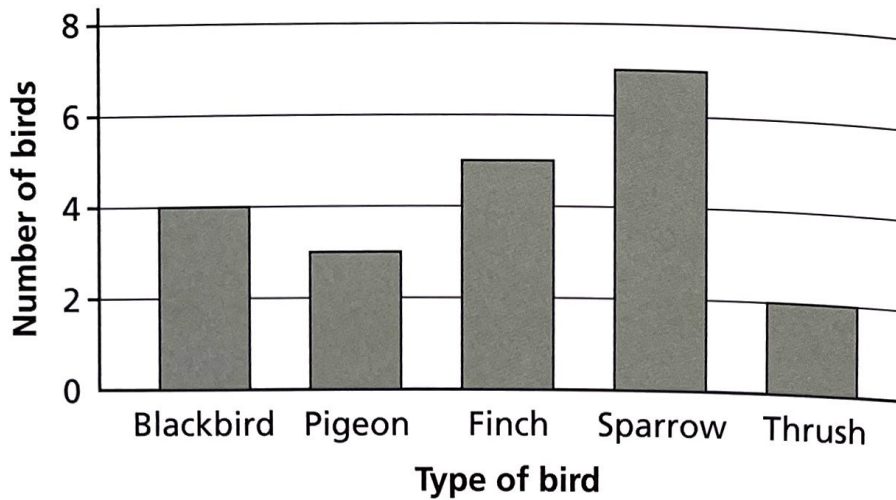
How many biscuits could Hannah have made?

- A** 13 **B** 17 **C** 19 **D** 21 **E** 23
-

5

Some pupils recorded the numbers of different types of bird that they saw at a bird table.

The bar chart shows their results.



How many more finches than thrushes did they see?

- A 1 B 2 C 3 D 4 E 5

6

Karen, Amrit and Sam are going to share two pizzas equally between them.

What fraction of a whole pizza should each of them have?

- A $\frac{1}{2}$ B $\frac{3}{4}$ C $\frac{1}{4}$ D $\frac{1}{3}$ E $\frac{2}{3}$

7

Dinesh spends £1.13.
He pays with a £2 coin.

What is the smallest number of coins that he can receive in change?

- A 6 B 7 C 4 D 5 E 8
-

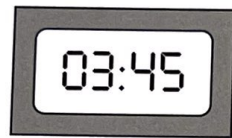
8

What number should go in the box?

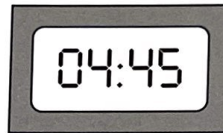
$$1680 + 1680 + 1680 + 1680 + 1680 = \boxed{} \times 10$$

- A 84 B 336 C 840 D 420 E 168
-

9



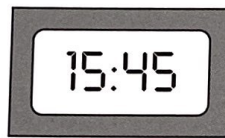
A



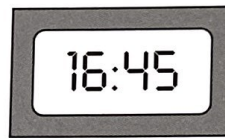
B



C



D



E

Which of these digital clocks shows that it is a quarter to four in the afternoon?

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

10

Here is part of a railway timetable.

London Paddington to Bath Spa					
London Paddington	0527	0630	0645	0700	0715
Reading	0557	0657	0711	0727	0741
Didcot Parkway		0712		0742	0756
Swindon	0625	0730	0740	0800	0815
Chippenham	0640	0745		0815	
Bath Spa	0653	0800		0830	

Maya wants to arrive in Didcot Parkway by half past seven in the morning.

What time must she leave London Paddington?

- A 0527 B 0630 C 0645 D 0700 E 0712

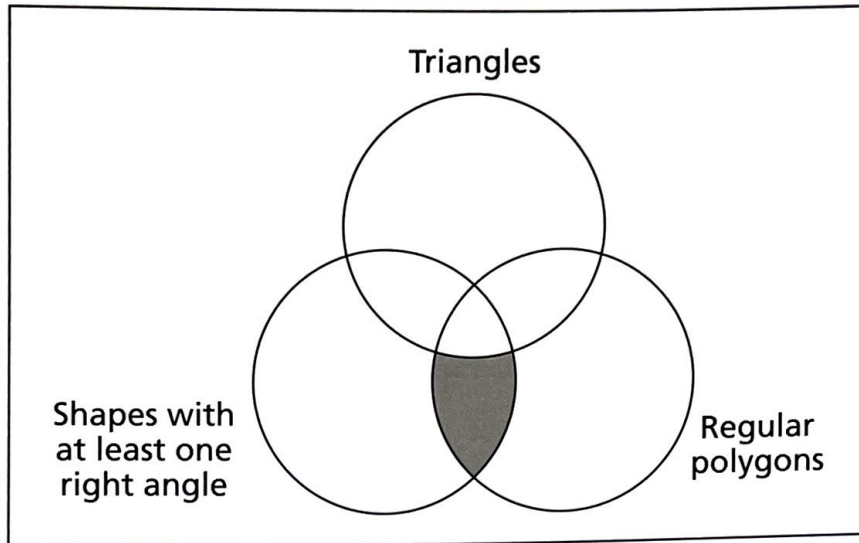
11

What is the cost of eight mugs at £1.99 each?

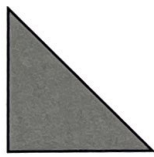
- A £15.92
B £15.98
C £16.00
D £16.02
E £16.08

12

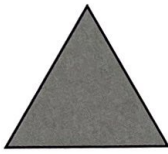
Look at the Venn diagram.



Which of these shapes should go into the shaded region?



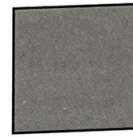
A



B



C



D



E

13

What is $1 - 0.11$?

A 0.99

B 0.09

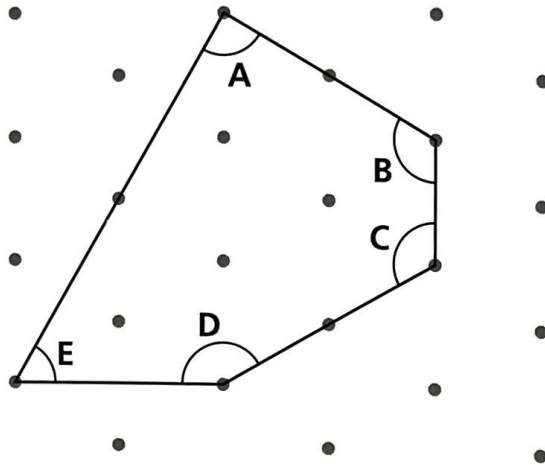
C 0.91

D 0.19

E 0.89

14

This shape is drawn on triangle dotted paper.



One of the angles is 60° . Which one is it?

A A

B B

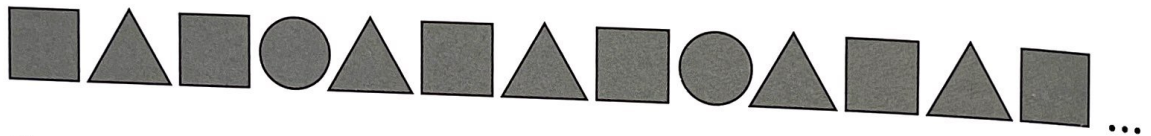
C C

D D

E E

15

This repeating pattern is made up of squares, triangles and circles.



The pattern repeats after five shapes.
It goes on and on, repeating again and again.

What fraction of all the shapes in the pattern are squares?

A $\frac{1}{5}$

B $\frac{1}{2}$

C $\frac{2}{5}$

D $\frac{6}{10}$

E $\frac{6}{13}$

16

Five friends were all born in 2007.
Their birthdays are shown in the table below.

Child	Birthday
Kieran	3 rd July
Haq	31 st May
Harriet	16 th June
Lisa	10 th May
Jake	28 th July

Who is the oldest?

- A Kieran B Haq C Harriet D Lisa E Jake

17

Akira wants to calculate the cost of:
two teas, one coffee, two sandwiches and three apples.

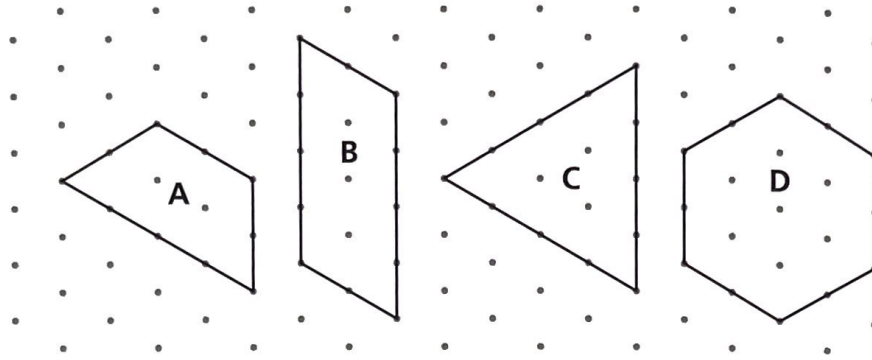
Café	
Tea or coffee.....	£1.99
Juice	£1.49
Sandwich.....	£2.99
Doughnut	£1.49
Apple.....	49p

Which of these calculations could he do?

- A $3 \times £2 + 2 \times £3 + 3 \times 50p + 3p$
B $3 \times £2 + 2 \times £3 + 3 \times 50p - 4p$
C $3 \times £2 + 2 \times £3 + 3 \times 50p + 4p$
D $3 \times £2 + 2 \times £3 + 3 \times 50p + 8p$
E $3 \times £2 + 2 \times £3 + 3 \times 50p - 8p$

18

These four shapes are drawn on a triangle dotted grid.



Which two shapes have the same area?

- A A and B B B and C C C and D D A and C E B and D

19

Which of these statements is correct?

- A $4\frac{1}{5} < 4.5$
 B $4\frac{1}{2} < 4.5$
 C $4\frac{1}{5} > 4.5$
 D $4\frac{1}{2} > 4.5$
 E $4\frac{1}{5} = 4.5$

20

10 pupils picked blackberries.

The table shows how many kilograms of blackberries they picked.

Weight in kilograms	Number of pupils
Less than $\frac{1}{2}$ kg	2
$\frac{1}{2}$ kg to less than 1 kg	0
1 kg to less than $1\frac{1}{2}$ kg	4
$1\frac{1}{2}$ kg to less than 2 kg	3
2 kg to less than $2\frac{1}{2}$ kg	1

How many pupils picked at least 1 kilogram?

- A 0 B 4 C 6 D 8 E 10

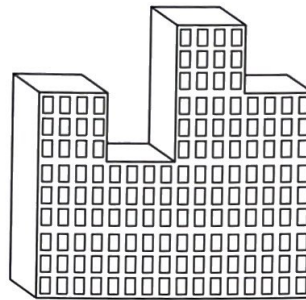
21

$$37 \times 497 + 63 \times 497 =$$

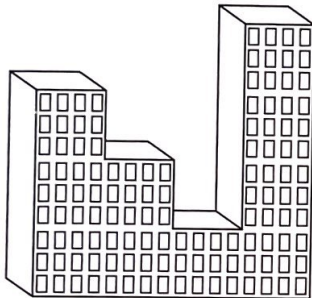
- A 9443
- B 44730
- C 49700
- D 54670
- E 9170644

22

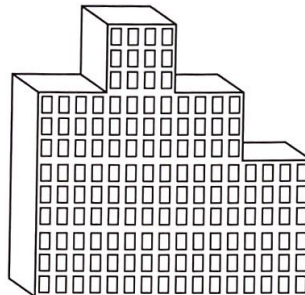
This is the front view of a large building:



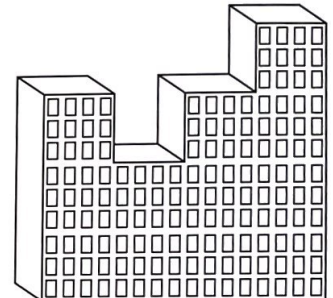
Which of these is the rear view of the building?



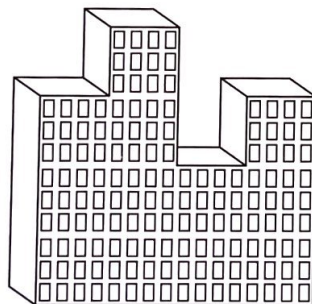
A



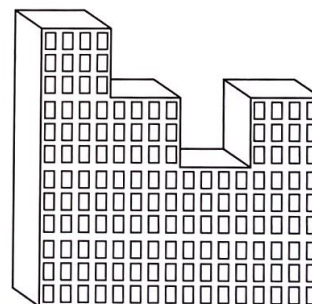
B



C



D



E

23

Josh started from a number between 1 and 5, and counted on in steps of 6. He reached the number 22.

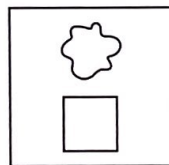
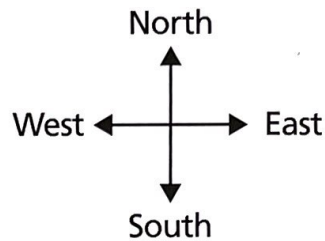
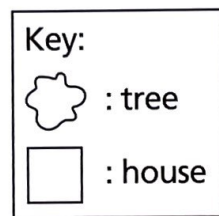
What number did he start from?

- A 4 B 2 C 1 D 3 E 5

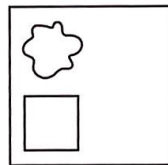
24

Callum is facing south-east. He can see a tree in front of him, and a house on his left.

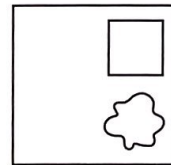
Which map is he on?



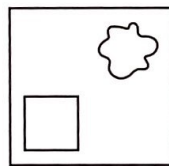
A



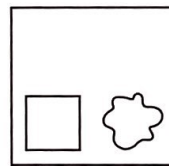
B



C



D



E

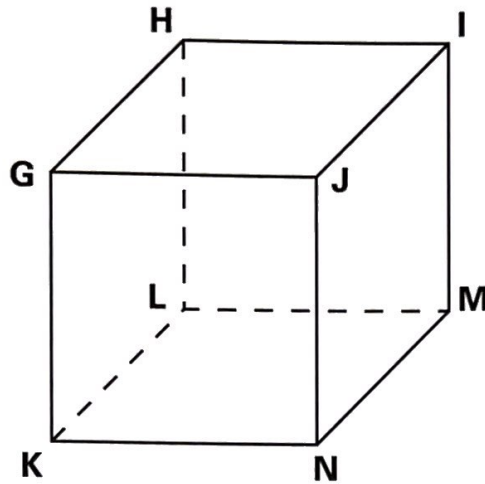
25

There are 816 pupils at Southfields School. There are 28 more girls than boys in the school.

How many girls are there in the school?

- A 380 B 436 C 408 D 394 E 422

26



A cube has vertices G, H, I, J, K, L, M and N.
A cut is made through the plane GJML.

Which name best describes the cut face GJML?

- A** square **B** rectangle **C** rhombus **D** quadrilateral **E** trapezium

27

Look at the information about what is in 100 grams of dried pasta.

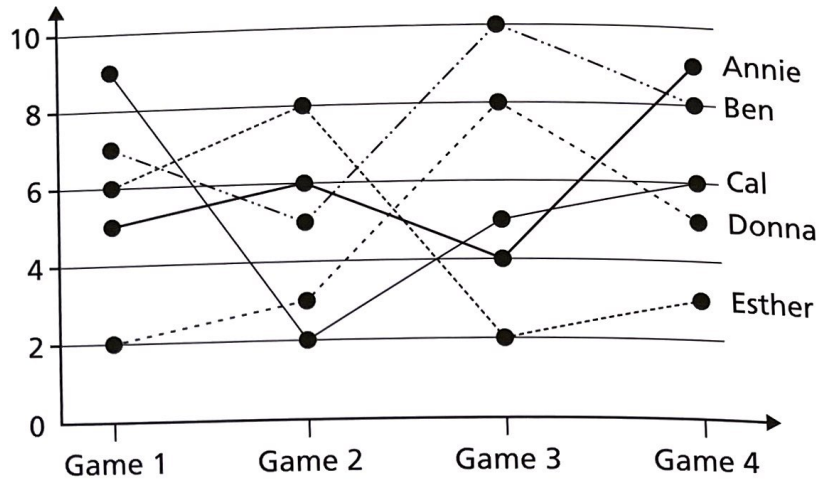
100 g contains:	
Protein	14.4 g
Carbohydrate	66.4 g
Fat	3.5 g
Fibre	2.6 g

How many grams of protein are there in 1 kilogram of pasta?

- A** 1.44g **B** 0.144g **C** 144g **D** 86.9g **E** 1.44kg

28

Five pupils played a game and scored points four times.
The graph shows how many points each pupil scored in each game.



Which pupil had the greatest difference between their lowest and highest scores?

- A Annie B Ben C Cal D Donna E Esther

29

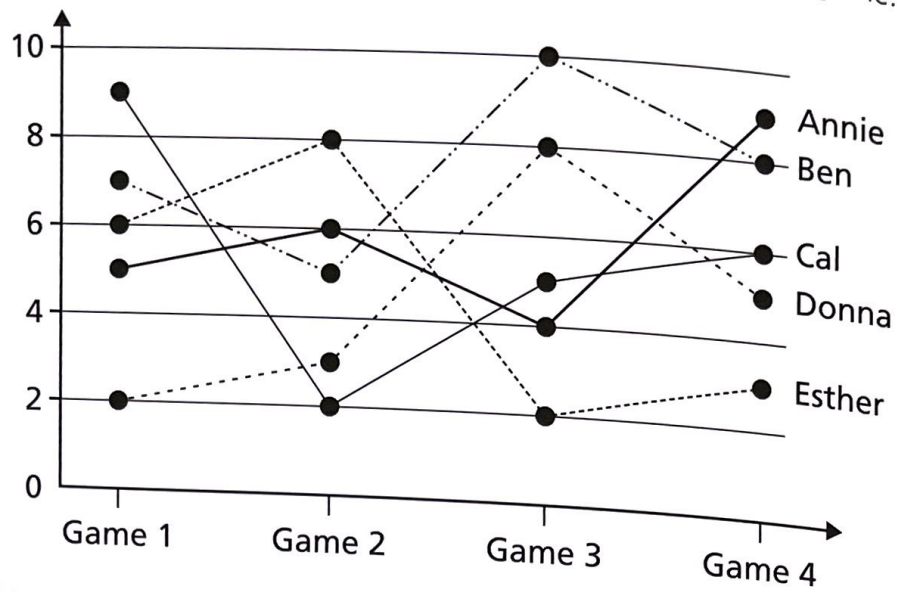
The sum of the first four square numbers is 30.

What is the sum of the first five square numbers?

- A 55 B 35 C 25 D 45 E 65

28

Five pupils played a game and scored points four times. The graph shows how many points each pupil scored in each game.



Which pupil had the greatest difference between their lowest and highest scores?

- A Annie B Ben C Cal D Donna E Esther

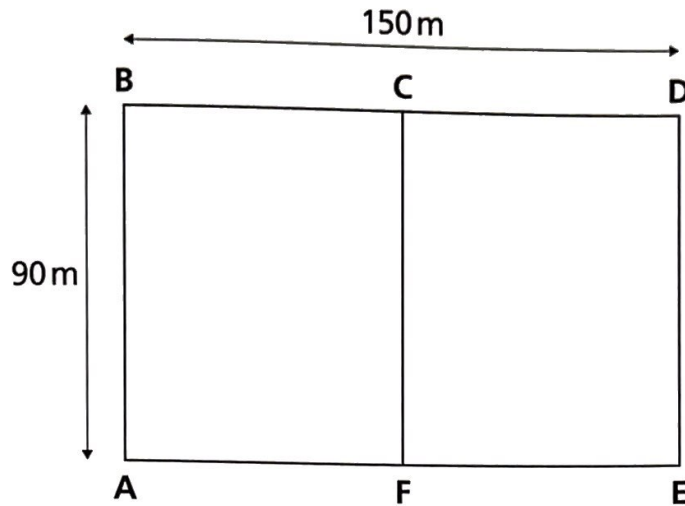
29

The sum of the first four square numbers is 30.

What is the sum of the first five square numbers?

- A 55 B 35 C 25 D 45 E 65

30



The playing field of Freeborough Primary School is a rectangle 150 metres long by 90 metres wide.

C and F are the middle points of the long sides.

The pupils are taking part in a sponsored walk around the field.

For each lap, the juniors walk around the rectangle ABDE and back to A.

For each lap, the infants walk around the rectangle ABCF and back to A.

How much further do the juniors walk than the infants for each lap?

- A** 75 m **B** 150 m **C** 240 m **D** 300 m **E** 330 m

31

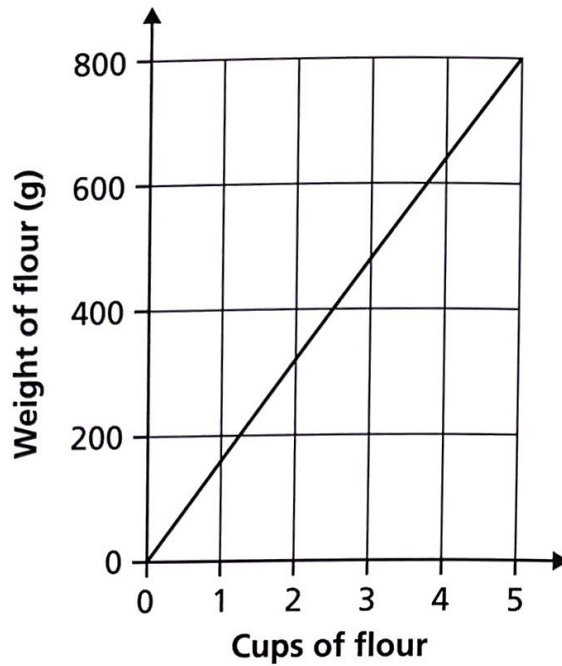


What number is the arrow pointing to on this number line?

- A** 44.5 **B** 47.05 **C** 47.5 **D** 47.65 **E** 53.5

32

This is a graph that converts cups of flour to grams:



Use the graph to work out the equivalent amount of flour in grams for 10 cups?

- A 800g B 1050g C 1250g D 1500g E 1600g

33

Look at this number fact:

$$789 \times 36 = 28\,404$$

What is 18×789 ?

- A 7101 B 14202 C 14204 D 14991 E 15774

34

Gymnastics Test	
Activity	Maximum Mark
Acrobatics	30
Balance	25
Climbing	25

There is a test to enter a gymnastics competition. Pupils need to score 75% or more in the test. Zach scored 24 in Acrobatics and 16 in Balance. He passed the test.

What was the minimum that he could have scored in the Climbing activity?

- A 20 B 16 C 19 D 15 E 21
-

35

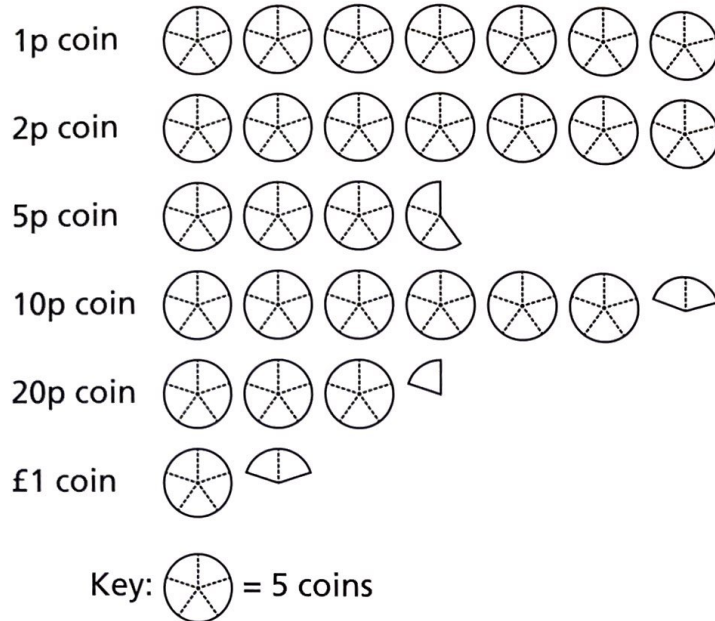
An electric light uses $1\frac{1}{2}$ pence worth of electricity every two hours. The light is left on from 6 pm on Friday until 6 pm on Sunday.

How much does the electricity cost?

- A 36p B 24p C 12p D 48p E 18p
-

36

Jamie had a lot of different coins in his money box.
He sorted them by type of coin.
He counted the number of coins in each group.
He drew a pictogram to show the results.



Which two groups of coins had the same value?

- A 1p and 2p
- B 2p and 5p
- C 5p and 10p
- D 10p and 20p
- E 20p and £1

37

A two-litre bottle of fruit squash is mixed with four times as much water.

How many 125-millilitre cups can be filled with the diluted squash?

- A 20
- B 80
- C 64
- D 100
- E 40

38

Bulu has a 2D shape.
All of its sides are the same length.

Which of these **CANNOT** be Bulu's shape?

- A a right-angled triangle
- B an equilateral triangle
- C a square
- D a rectangle
- E a parallelogram

39

A Number of centimetres in a kilometre.

B Number of millimetres in a kilometre.

C Number of grams in a kilogram.

D Number of milligrams in a gram.

E Number of millilitres in a litre.

Which one of the above is equal to one million?

- A A B B C C D D E E

40

The price of a television is reduced in a sale by 20%.

If the sale price is £160, what was the original price of the television?

- A £128 B £180 C £200 D £192 E £188

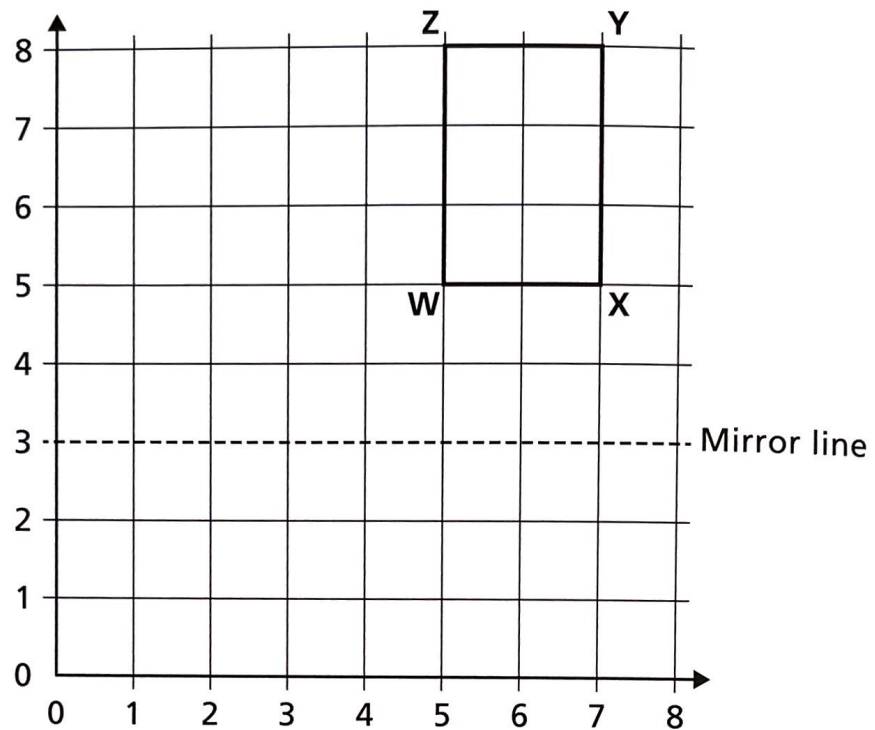
41

Mrs Rai buys five metres of ribbon.
She cuts off three equal pieces and has 20 cm left.

What is the length of each of the three pieces?

- A 480 cm B 1.6 cm C 250 cm D 320 cm E 160 cm

42



The rectangle WXYZ is reflected in the mirror line.

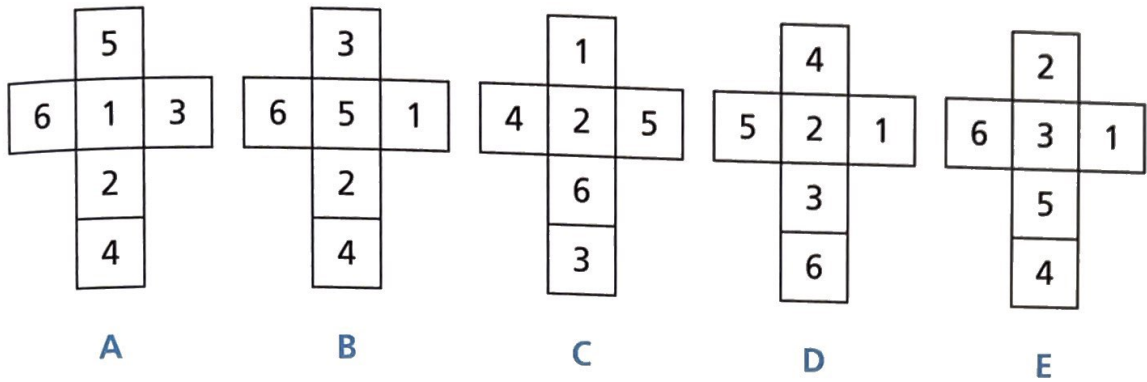
What will the new coordinates of point X be?

- A (7, 1) B (7, 2) C (5, 1) D (2, 7) E (7, 3)

43

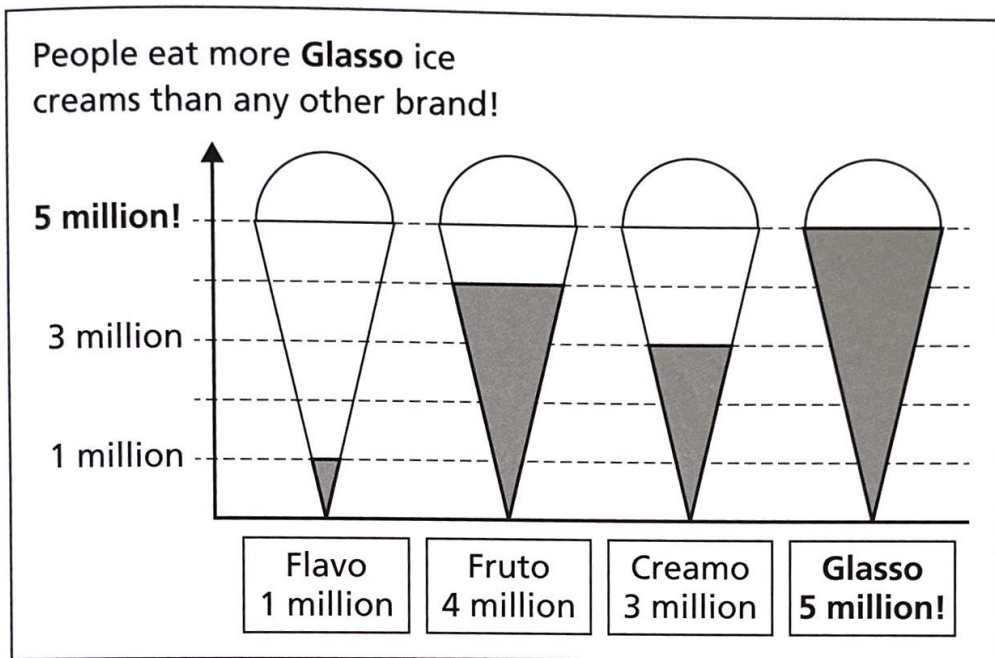
The numbers on the opposite faces of a number cube always add up to 7.

Which of these nets will fold up to make a number cube?



44

This advertisement is misleading.



Why is it misleading?

- A The ice cream cones are unevenly spaced along the horizontal axis.
- B The values along the vertical axis are unevenly spaced.
- C The area for Glasso is more than five times the area for Flavo.
- D It does not show how many will be sold next year.
- E It does not show how many ice lollies or sweets people eat.

45

Cinema tickets for adults cost £10.20.
Children's tickets are half price.

In pounds, how much do the tickets cost for a group of five adults and 10 children?

- A £51 B £102 C £5.10 D £127.50 E £25.50

46

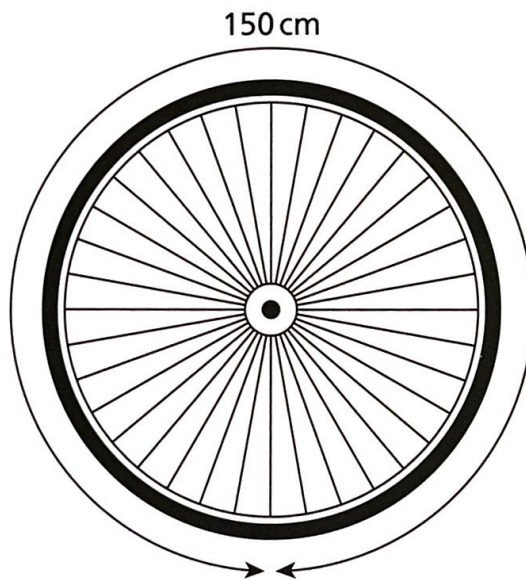
Rosie draws a square on a coordinate grid with corners at (5, 5), (7, 5), (7, 7) and (5, 7).

Which one of these points is inside Rosie's square?

- A (4, 4) B (6, 6) C (6, 8) D (8, 8) E (4, 6)

47

The distance around the outside of Fran's bicycle is 150 cm.

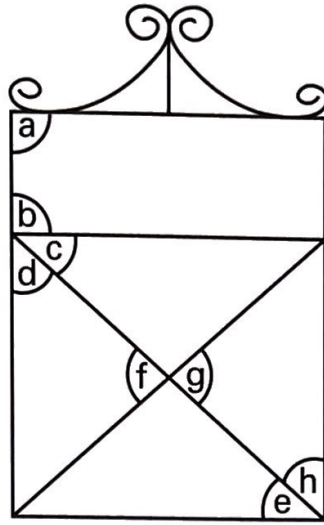


How many complete revolutions must the wheel make for Fran to travel 1.5 km?

- A 1000 B 100 C 10000 D 100000 E 10

48

This shows some angles on a diagram of an iron gate.

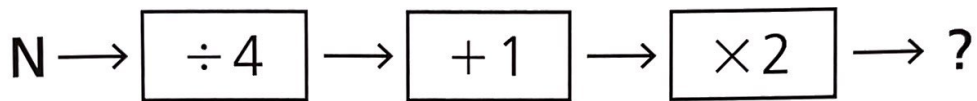


Which of these is not necessarily true?

- A $a = b$ B $d = h$ C $a = c + d$ D $e = h$ E $f = g$

49

Look at this number machine:



If the final number is 4, what is the value of N?

- A 2 B 6 C 4 D 8 E 1

50

A tin of paint costs £6 and will cover five square metres of wall.

What is the cost of painting a wall 4.5 m long and 3 m high?

- A £12 B £13.50 C £15 D £16.20 E £18