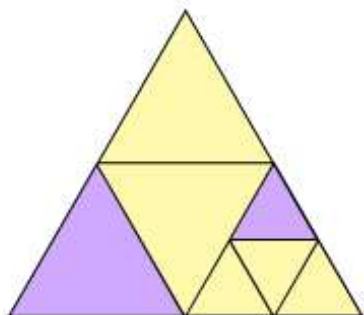


The diagram shows one large triangle which has been broken into identical medium-sized triangles. Then one of the medium-sized triangles has been broken into smaller triangles.



What fraction of the original diagram is shaded?

$$\frac{2}{7}$$



$$\frac{1}{4}$$

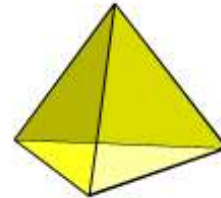
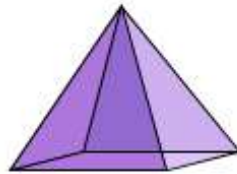
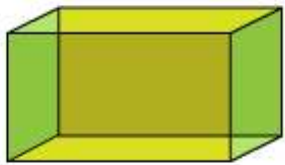


$$\frac{1}{10}$$



$$\frac{5}{16}$$





Which of the following statements is correct?

☐ A square pyramid has six faces.

☐ A rectangular prism has 10 edges.

☐ A triangular pyramid has eight vertices.

☐ A pentagonal prism has seven faces.



Raffi cycles at an average speed of 24 kilometres in one hour.

At that speed, how far will he ride in 50 minutes?

☐ 16 km

☐ 20 km

☐ 21.5 km

☐ 22 km



Louise bought 30.8 litres of petrol at 135.9 cents per litre.

When she paid for her purchase, she used a '6c per litre discount' voucher.

The best estimate of the amount she pays is

☐ \$40.00


☐ \$45.00

☐ \$50.00

☐ \$55.00

The rule for finding the next number in a pattern is 'add the previous two numbers together'.

3 7   27 44

What is the value of  ?

☐ 10

☐ 17

☐ 18

☐ 20



Iboki and Liam started with the same number.

Iboki multiplied the number by 10 while Liam divided the number by 20.

If Liam's answer was 5, what is the difference between the boys' answers?

☐ 95

☐ 995

☐ 1005

☐ 1995

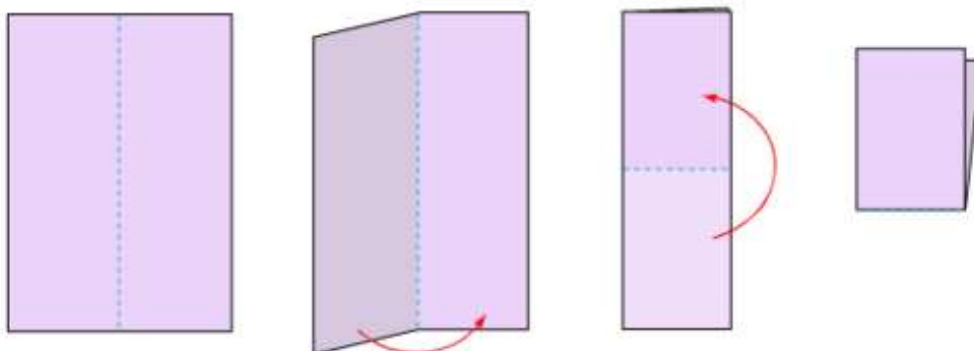
The number pattern in diagram P is repeated in diagram Q.

P	Q
$\frac{1}{2}$	X
24	6
12	18

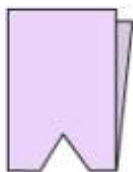
What is the value of X?

☐☐☐☐

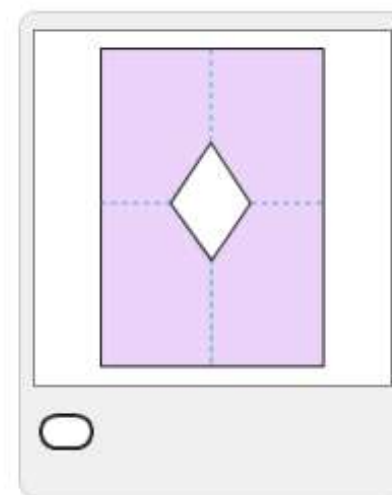
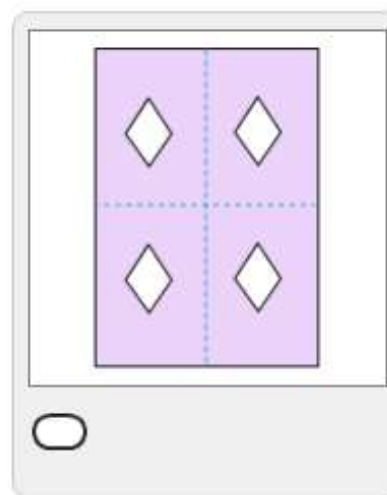
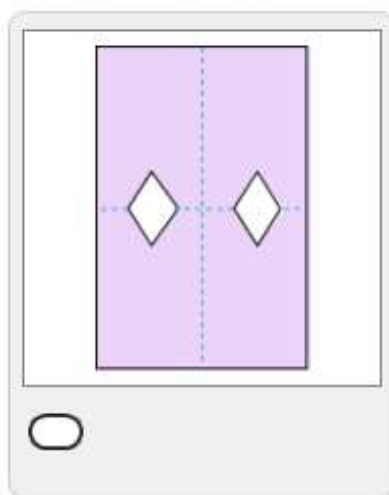
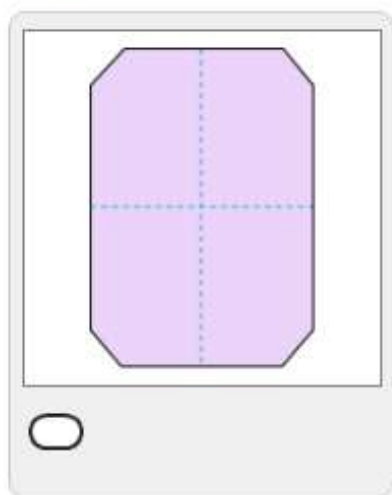
Jo folded a sheet of paper in half and then folded it in half again.



From the **bottom side** she cut out a triangle.



What did Jo's paper look like when she unfolded it?





2.6 kg



2 kg

A bottle of juice weighs 2.6 kilograms. When a quarter of the juice has been used the bottle weighs 2 kilograms. What will the bottle weigh when half the juice has been used?

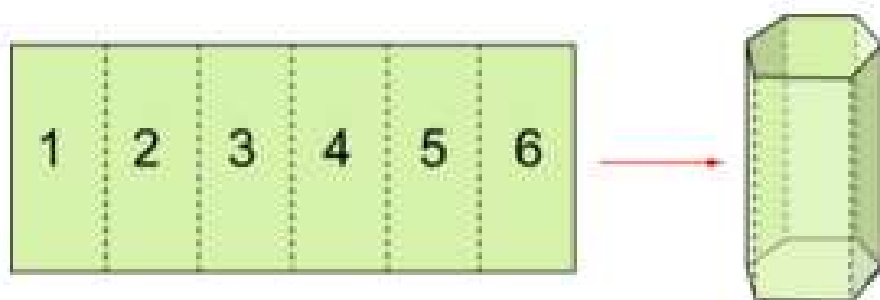
☐ 1 kg

☐ 1.2 kg

☐ 1.4 kg

☐ 1.6 kg

A piece of cardboard was divided into six strips with dotted lines, and the strips were then numbered. The card was folded along the dotted lines and bent to form a hexagonal tube.



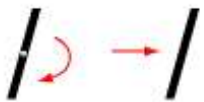
Which statement is correct?

☐ The face numbered 3 is opposite the face numbered 5.

☐ The face numbered 1 is not next to the face numbered 6.

☐ The face numbered 2 is opposite the face numbered 6.

☐ The face numbered 1 is opposite the face numbered 4.



The symbol / has half-turn symmetry. If rotated 180° about its centre it would look exactly the same.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

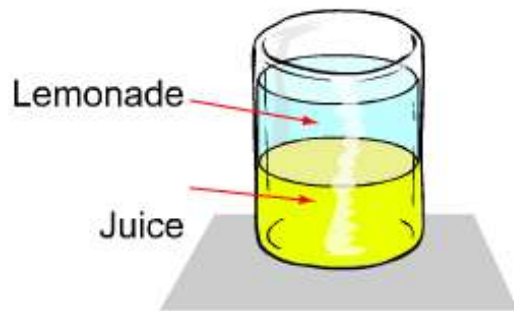
How many of the letters of the alphabet have half-turn symmetry?

☐ 6

☐ 7

☐ 8

☐ 9



Nathan half filled a glass with fruit juice and then filled the rest of the glass with lemonade.
He drank half of the mixture and then filled the glass to the top with more lemonade.
What fraction of the final mixture is lemonade?

☐ $\frac{1}{8}$

☐ $\frac{1}{4}$

☐ $\frac{3}{8}$

☐ $\frac{3}{4}$



A bag contains 100 balls, of which three-quarters are red and the rest are blue.
After some of the red balls are removed, half of the balls are now red.
How many red balls were removed?

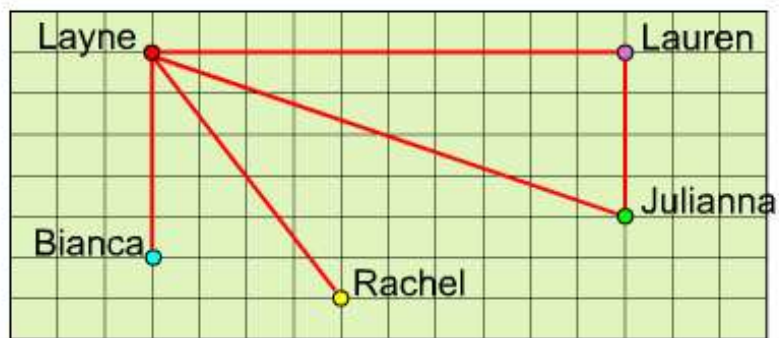
☐ 20

☐ 25

☐ 50

☐ 75

The map shows the location of the homes of five friends.



Julianna and Lauren live 240 metres apart.

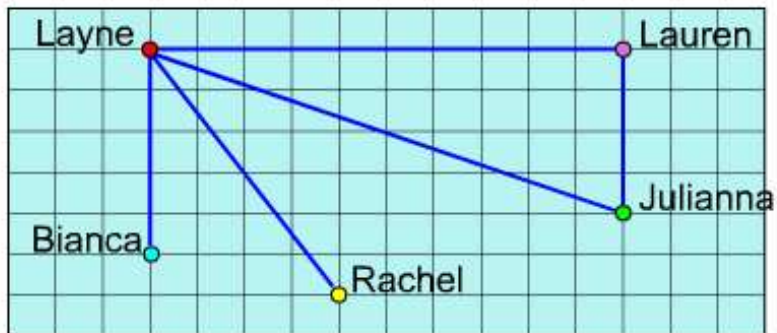
What is the shortest distance between Layne's home and Lauren's home?

☐ 100 m

☐ 360 m

☐ 540 m

☐ 600 m



Julianna and Lauren live 240 metres apart.

Lauren and Bianca both ride at an average speed of 100 metres per minute.

They both leave their homes at the same time and ride to Layne's home.

How much later does Lauren arrive than Bianca?

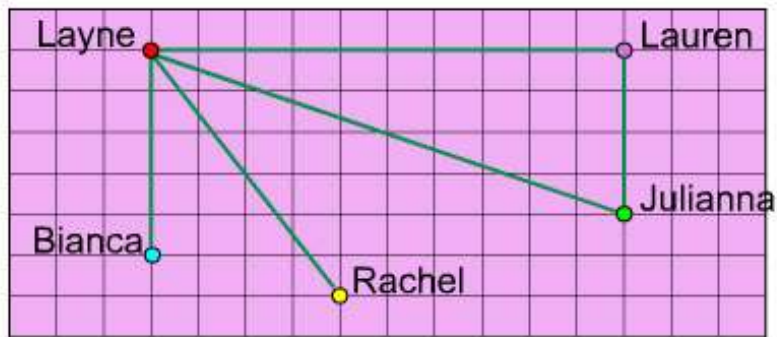
☐ 1 min

☐ 3 min

☐ 5 min

☐ 12 min

The map shows the location of the homes of five friends.



Julianna and Lauren live 240 metres apart.

Layne's four friends were at her home watching a movie.

All four girls left Layne's home at 4 pm and walked to their homes at the same speed.

Bianca arrived home at 4:06 pm.

Who reached their home at about 4:09 pm?

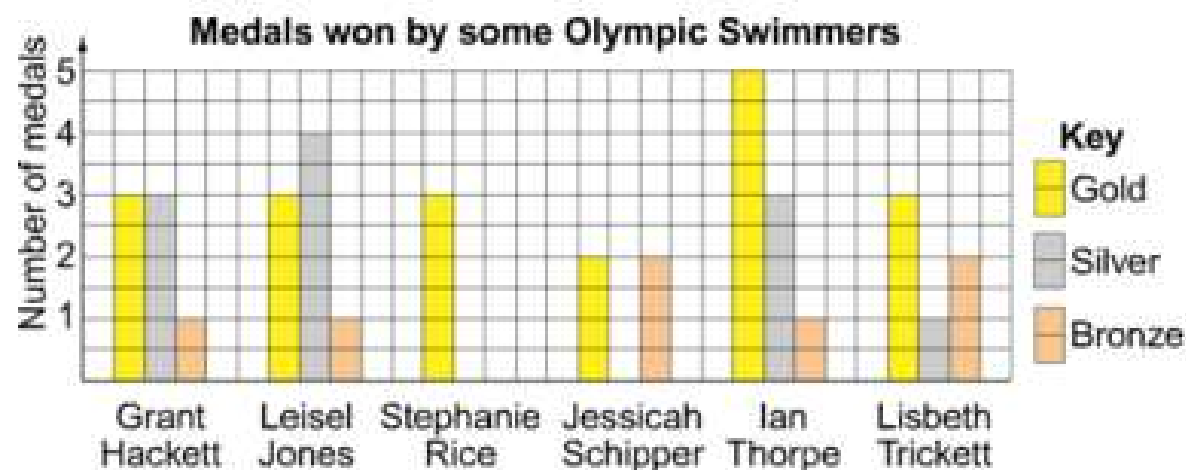
☐ Bianca

☐ Rachel

☐ Julianna

☐ Lauren

The graph shows the number of medals won by six swimmers at the Olympic Games.



Which statement is not correct?

- ☐ Of these swimmers, Ian Thorpe has won the most medals.
- ☐ Together the six swimmers have won more gold medals than silver and bronze medals combined.
- ☐ The swimmer with the highest percentage of their medals being gold is Ian Thorpe.
- ☐ The swimmer with the highest percentage of their medals being silver is Leisel Jones.



The desks in Gisele's classroom are arranged in equal rows.

Her desk is third from the front and second from the back.

As she sits at her desk there are four desks on her right and three on her left.

How many desks are in Gisele's classroom?

☐ 28

☐ 32

☐ 35

☐ 40

$$8 \times 328 = 32 \times \triangle$$

What is the value of \triangle ?

☐ 64

☐ 72

☐ 82

☐ 90

Chiara asked the people in all the houses in her street how many pets they had. She put the results in this table.

Number of pets	Number of houses
0	5
1	8
2	10
3	6
4	0
5	2

How many pets live in Chiara's street?

☐ 15

☐ 31

☐ 56

☐ 64