Gorda is standing on the middle rung of a ladder.

He steps up three rungs, down six rungs and then up eight rungs before he steps onto a roof.

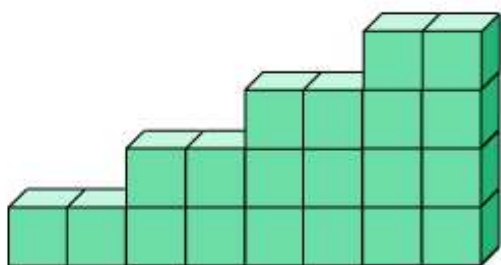How many rungs are on the ladder?

○ 5 rungs

○ 9 rungs

○ 10 rungs

○ 11 rungs

Hannah built a solid in this pattern.

The solid contains identical cubes each with side length 2 cm.

Hannah continues the pattern by making more rows.

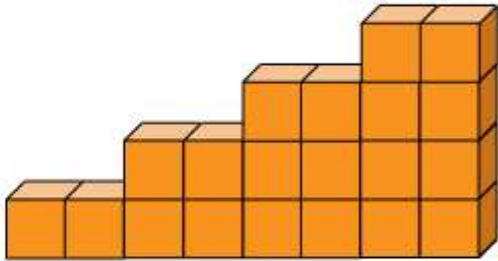If the solid is 12 cm high, how long is its base?

- ⬭ 12 cm
- ⬭ 14 cm
- ⬭ 20 cm
- ⬭ 24 cm

Hannah built a solid in this pattern.

The solid contains identical cubes each with side length 2 cm.

If the base of the solid is 20 cm long, what is the volume of the solid?

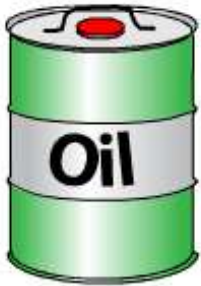|			
160 cm^3	200 cm^3	240 cm^3	280 cm^3
○	○	○	○

An empty drum weighs 600 grams.

When it is half full of oil, the mass of the drum and the oil together is 2.4 kilograms.

What is the mass of the drum and the oil together when it is a quarter full?

○ 1.2 kg

○ 1.5 kg

○ 1.6 kg

○ 1.8 kg

The timeline shows the year of birth of four generations of a family. All family members were born on the same day of the year.

| Frederick | Darcy | Barry | Jackson |

1903 — 1994

(Not to scale)

Frederick was 25 years old when his son Darcy was born.

When Jackson was born, Barry was half the age of Darcy.

In what year was Barry born?

○ 1961

○ 1963

○ 1965

○ 1967

Saeed listed these decimal numbers:

0.06   0.201   0.3   0.099   0.072

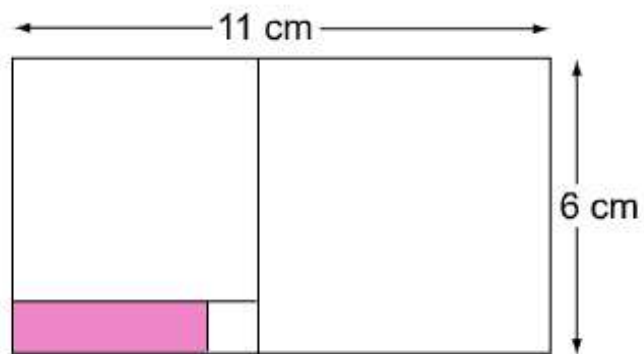What is the difference between the greatest and least numbers?

○ 0.24

○ 0.195

○ 0.201

○ 0.291

A rectangle has been divided into three squares and a rectangle:

- 11 cm -

6 cm

What is the area of the shaded rectangle?

3 cm²	4 cm²	5 cm²	6 cm²
○	○	○	○

Here is a pattern of numbers:

Line 1: $3 + 6 + 9 = 18$

Line 2: $12 + 15 + 18 = 45$

Line 3: $21 + 24 + 27 = 72$

Line 4: $30 + 33 + 36 = 99$

What is Line 6?

$39 + 42 + 45 = 126$ ○

$48 + 51 + 54 = 153$ ○

$51 + 54 + 57 = 162$ ○

$57 + 60 + 63 = 180$ ○

Here is a pattern of numbers:

Line 1: $3 + 6 + 9 = 18$

Line 2: $12 + 15 + 18 = 45$

Line 3: $21 + 24 + 27 = 72$

Line 4: $30 + 33 + 36 = 99$

Which of these number sentences will be in the pattern?

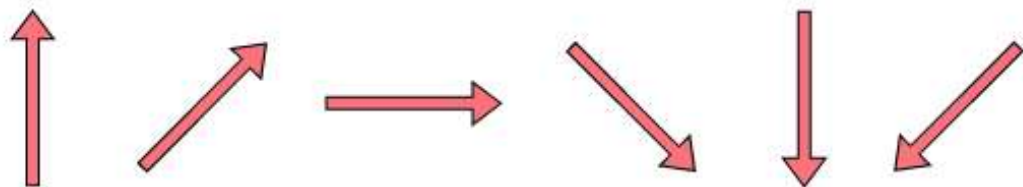| $56 + 59 + 62 = 177$	$65 + 68 + 71 = 204$	$83 + 86 + 89 = 258$	$93 + 96 + 99 = 288$
⬭	⬭	⬭	⬭

These shapes are forming a pattern:
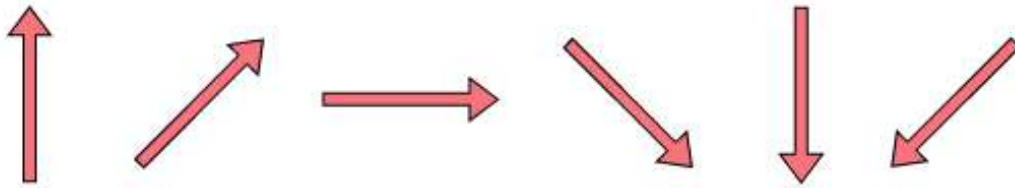
What is the pattern?

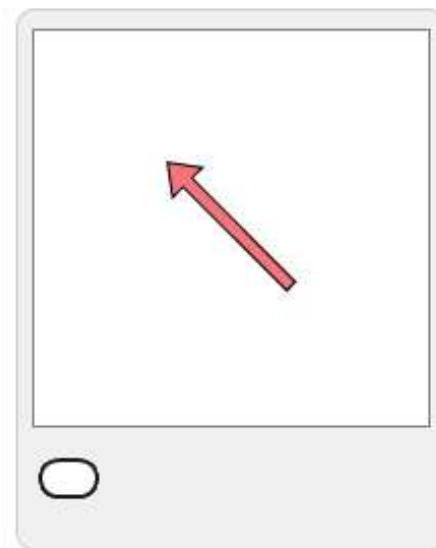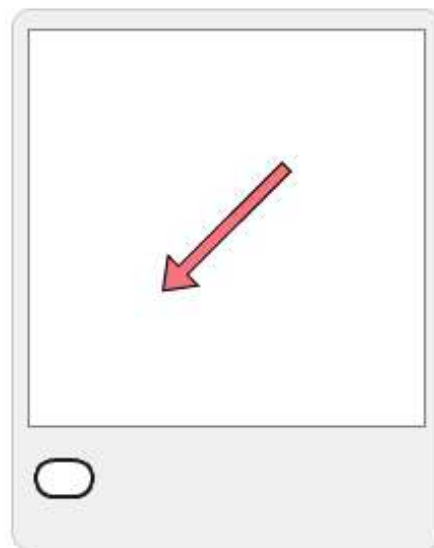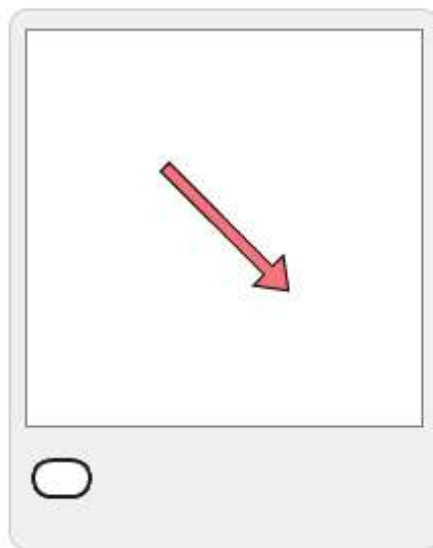| Rotate the shape 45° anticlockwise	Rotate the shape 45° clockwise	Rotate the shape 60° anticlockwise	Rotate the shape 60° clockwise
⬭	⬭	⬭	⬭

These shapes are following a pattern:

What will the 58th shape be?

The number 8 is 20% of ?
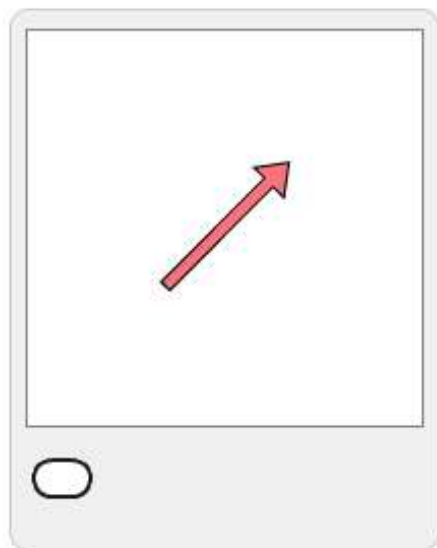
- ◯ 40
- ◯ 56
- ◯ 60
- ◯ 160
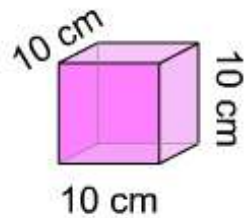
Each sheet of postage stamps has 10 rows of 10 stamps.

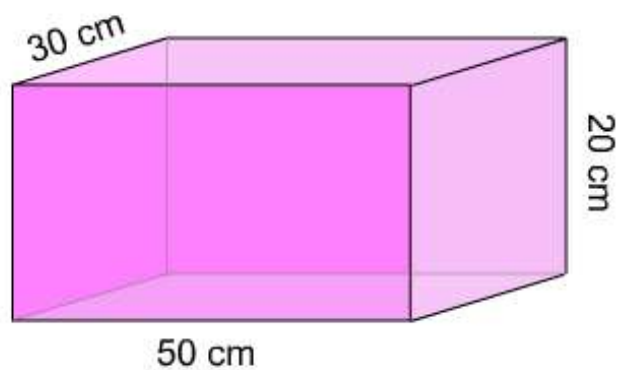If each stamp has a value of 55 cents, what is the total value of 10 sheets?

○ $5.50

○ $5.00

○ $550

○ $555

A cubic container this size will hold 1 litre of water.

How much water will this container hold?

- ○ 3 litres
- ○ 10 litres
- ○ 30 litres
- ○ 100 litres

The opening ceremony of the Winter Olympics in Vancouver, Canada, started at 9 pm.
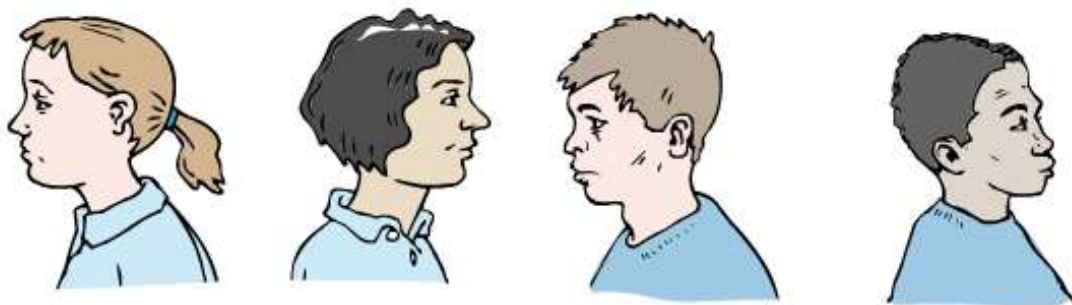
If local time in Hobart is 19 hours ahead of Vancouver, what time did the viewers in Hobart watch the start of the ceremony on television?

- ○ 3 pm
- ○ 4 pm
- ○ 5 pm
- ○ 6 pm

There are 60 students in Year 6 at a primary school.
Three-fifths of the students are girls.
A number of the students own a mobile phone.
Of the students who do not own a mobile phone, one-third are boys.
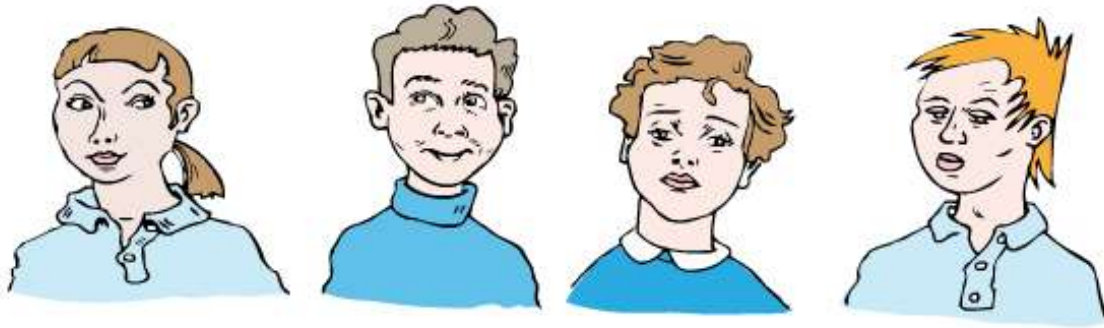Three-quarters of all the boys in Year 6 own a mobile.

How many boys in Year 6 do not own a mobile?

- ⬭ 6
- ⬭ 9
- ⬭ 12
- ⬭ 16

There are 60 students in Year 6 at a primary school.

Three-fifths of the students are girls.

A number of the students own a mobile phone.

Of the students who do not own a mobile phone, one-third are boys.

Three-quarters of all the boys in Year 6 own a mobile.

How many girls own a mobile phone?

- ◯ 12
- ◯ 18
- ◯ 20
- ◯ 24

There are 60 students in Year 6 at a primary school.

Three-fifths of the students are girls.

A number of the students own a mobile phone.

Of the students who do not own a mobile phone, one-third are boys.

Three-quarters of all the boys in Year 6 own a mobile.

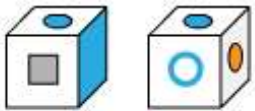What fraction of all the students do not own a mobile phone?
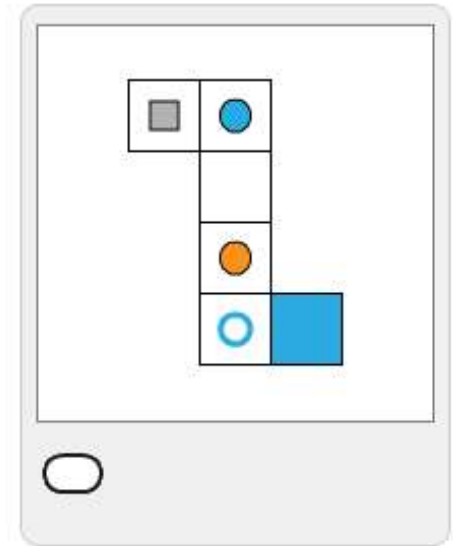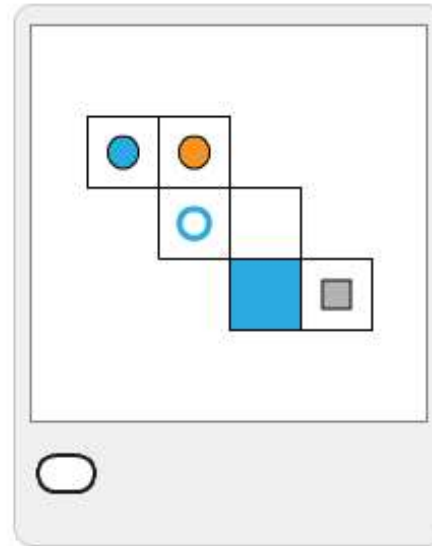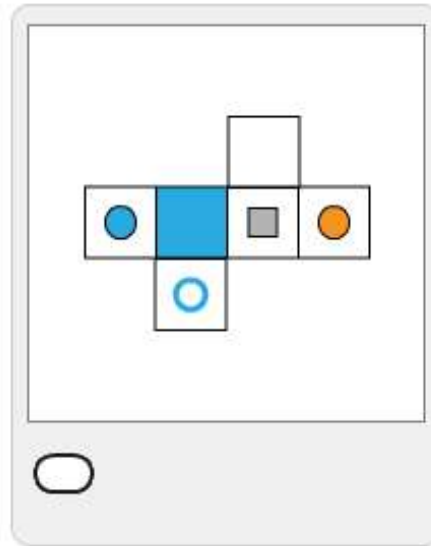
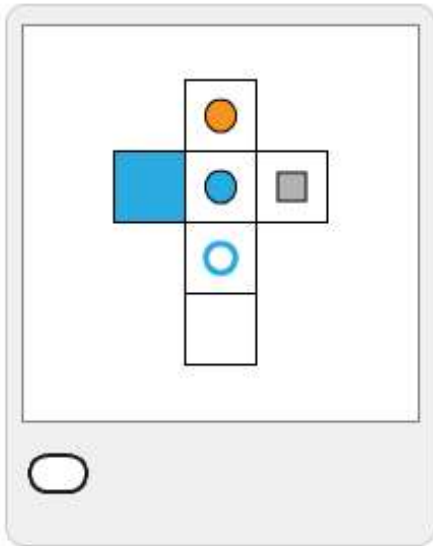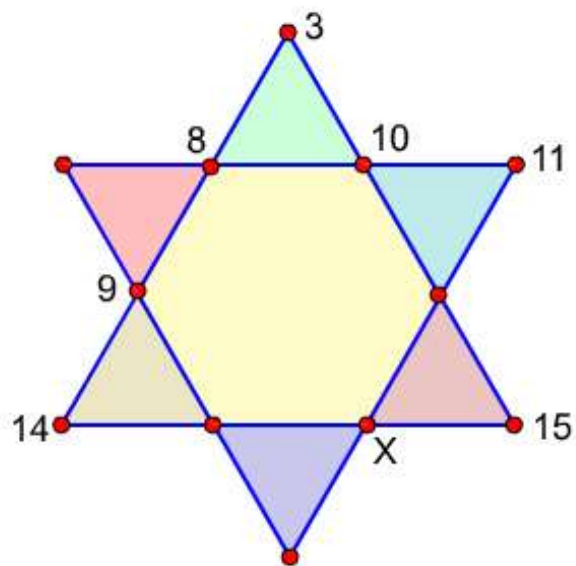| $\frac{3}{10}$	$\frac{1}{2}$	$\frac{3}{5}$	$\frac{7}{10}$
⬭	⬭	⬭	⬭

Here are two views of the same cube.

Which could be the net of this cube?

The four numbers along each line add to the same number.
The numbers 1, 4, 5, 6 and 16 are missing from the diagram.

Which number is X?

- ○ 1
- ○ 4
- ○ 6
- ○ 16