

KS2 MATHS

Count backwards through zero to include
negative numbers

Number – Number & Place Value



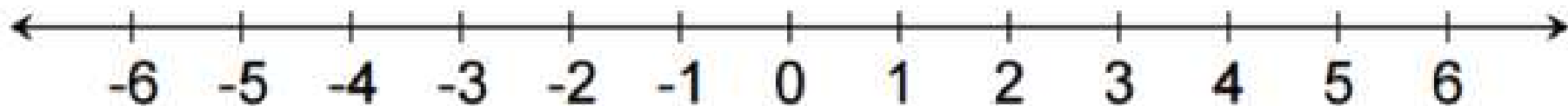
YEAR 4

**NEW - 2014
curriculum**

What is a negative number?

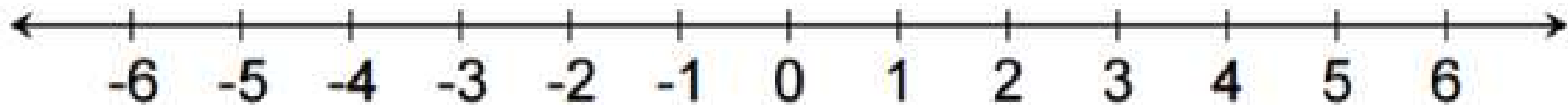
A negative number is a number that is below 0, e.g. -1 and -25.

We sometimes hear of this when talking about temperature.



What is it going up in?

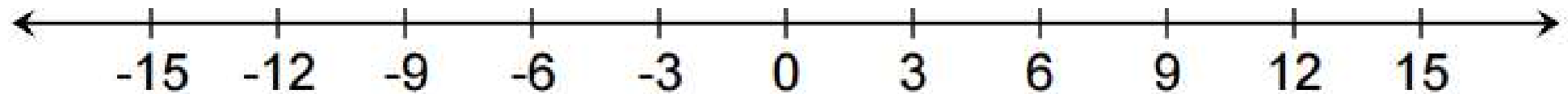
This number line is going up in increments of:



Up in increments of 1

What is it going up in?

This number line is going up in increments of:



Up in increments of 3

Order the following set of numbers:

Place the following numbers in order from smallest to largest:

- 14

- 5

- 23

- 1

2

- 23

- 14

- 5

- 1

2

Order the following set of numbers:

Place the following numbers in order from largest to smallest:

- 24 17 - 7 - 18 9

17

9

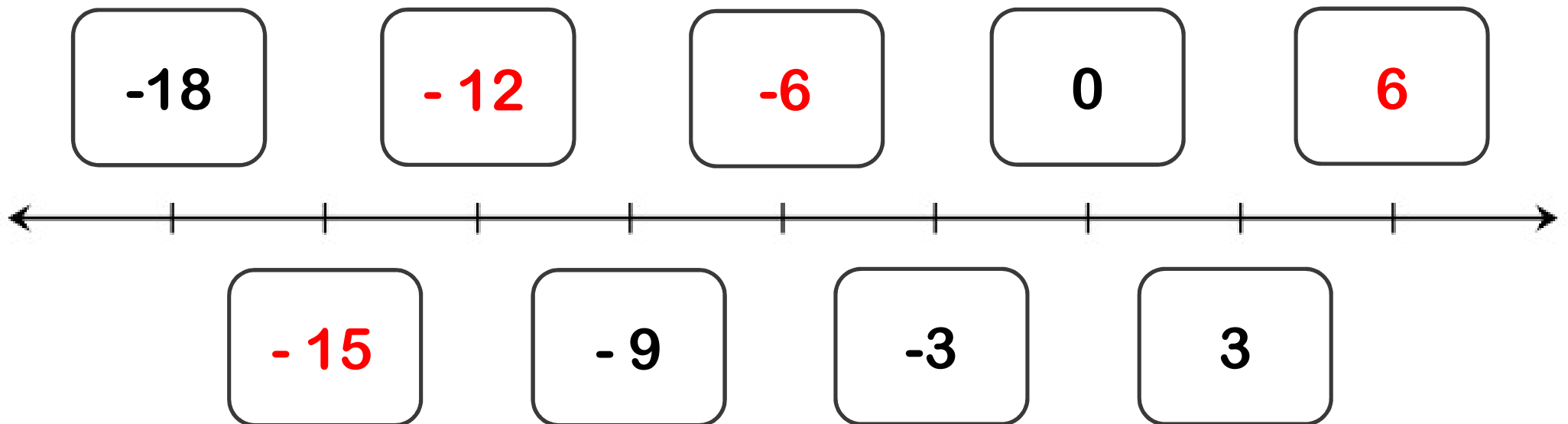
- 7

- 18

- 24

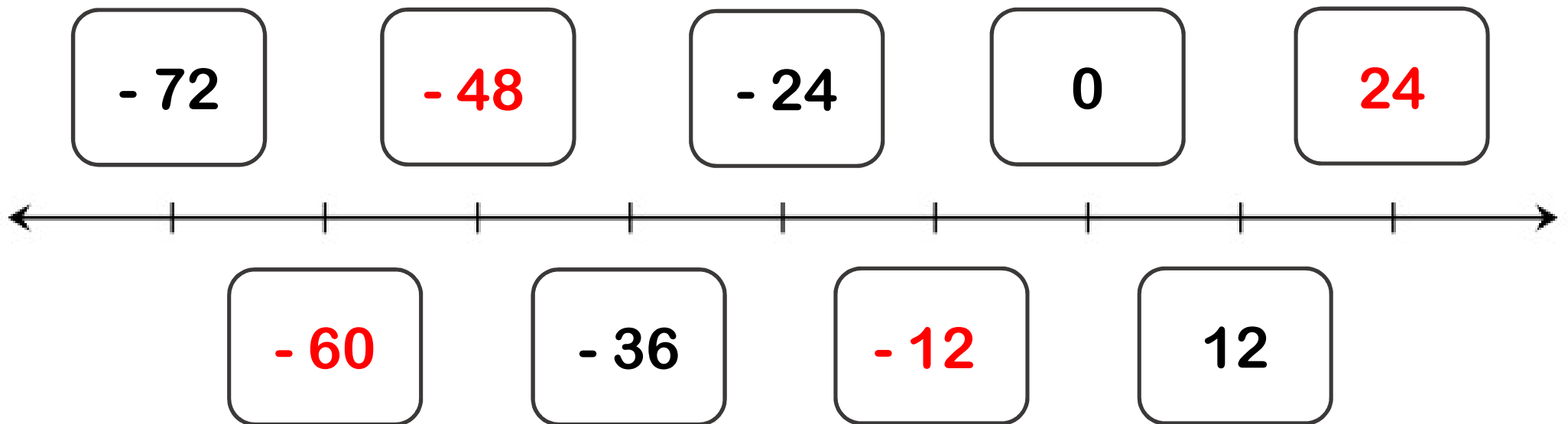
Missing numbers on a number line

Complete the number line with the missing numbers:



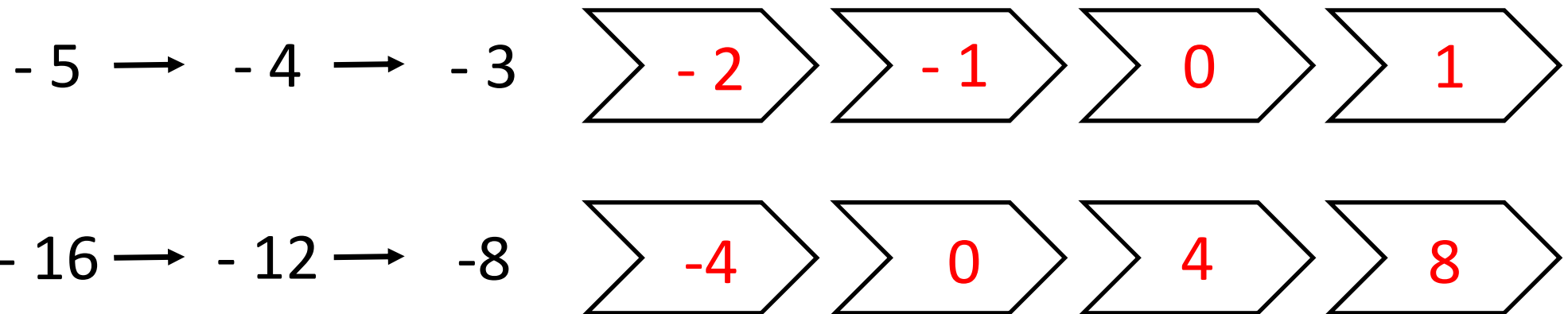
Missing numbers on a number line

Complete the number line with the missing numbers:



Carry on the sequence:

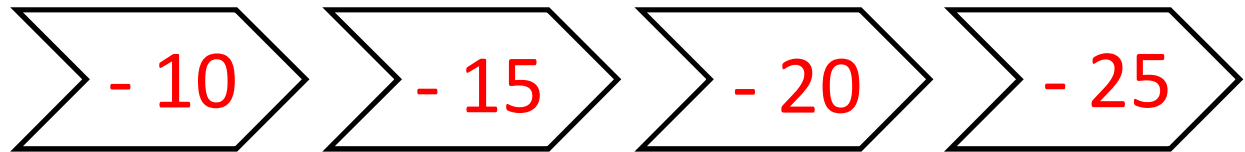
Determine what each number increases by and carry on the sequence.



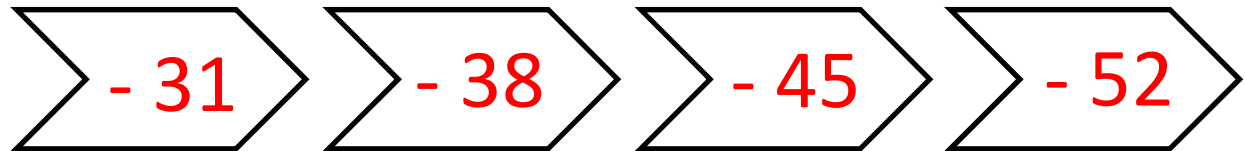
Carry on the sequence:

Determine what each number decreases by and carry on the sequence.

5 → 0 → -5



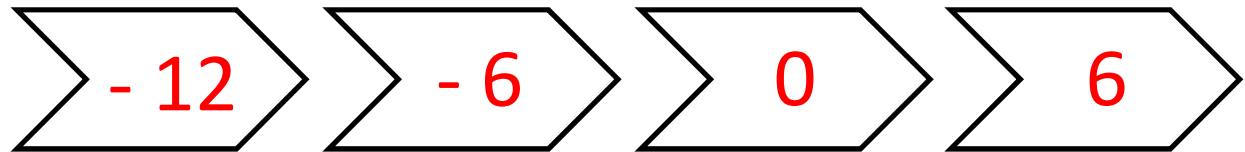
-10 → -17 → -24



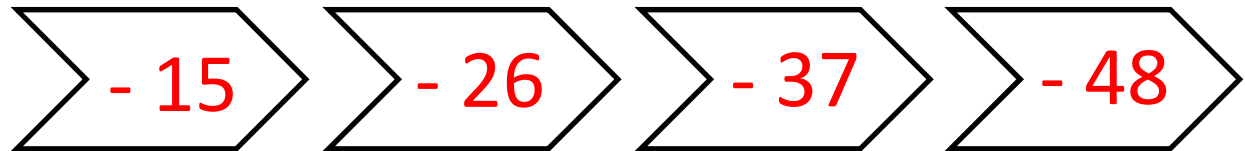
Carry on the sequence:

Use the following rules to continue the sequence from the first number:

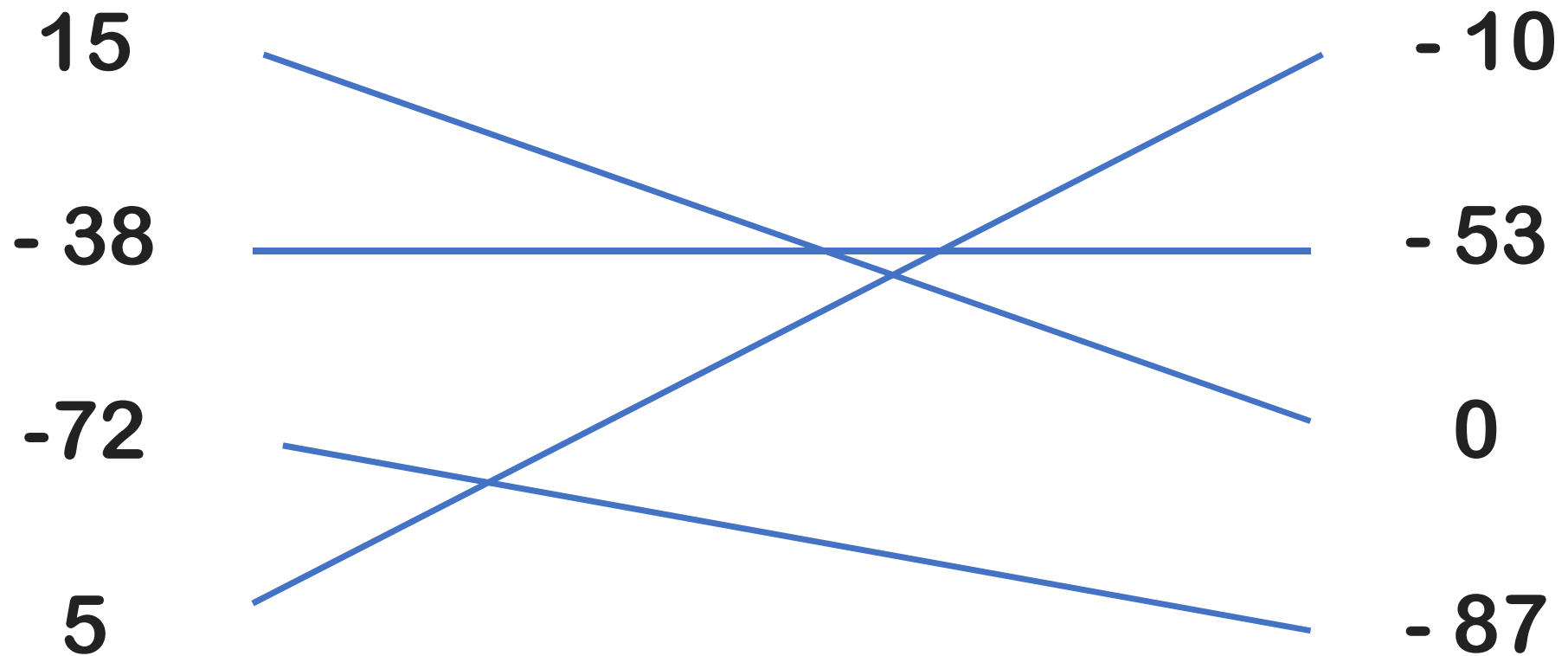
- 18 → increase by 6



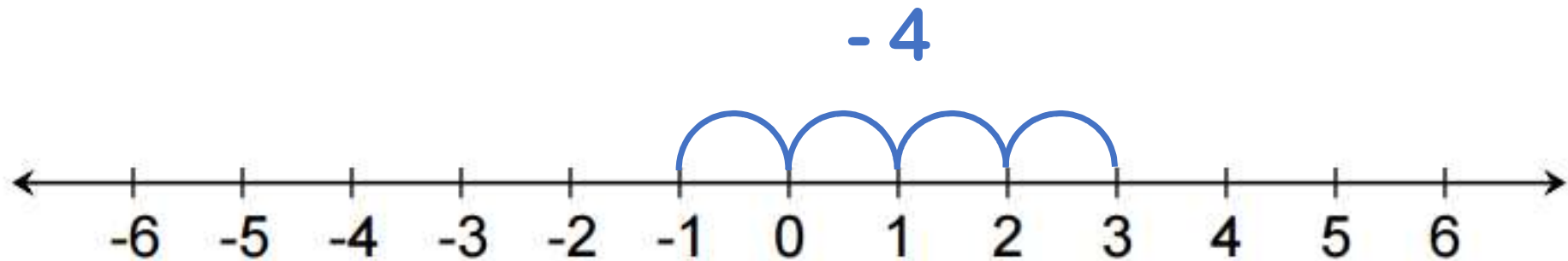
- 4 → decrease by 11



Subtract 15 from each number:

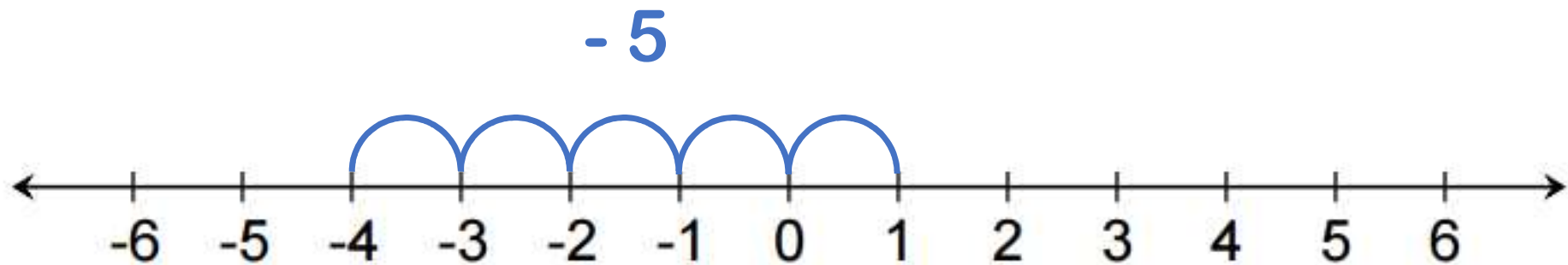


Negative numbers using a number line:



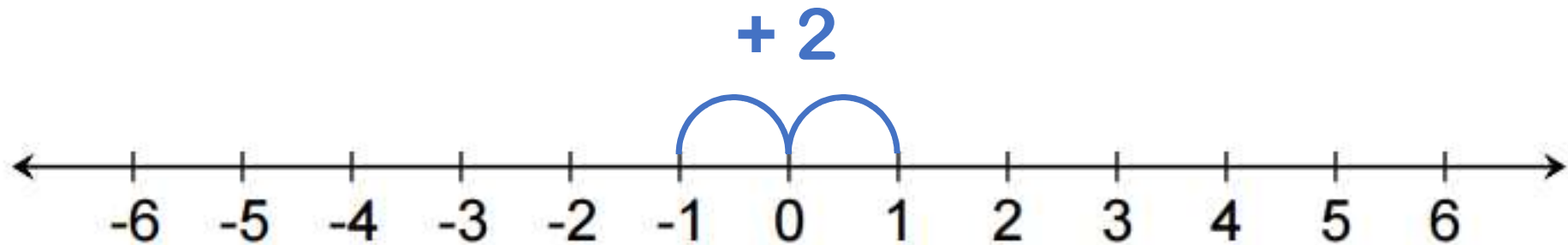
$$3 - 4 = \boxed{-1}$$

Negative numbers using a number line:



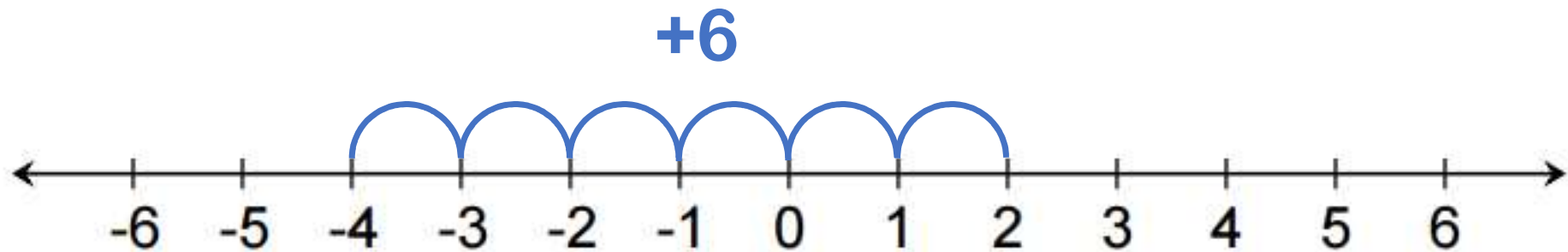
$$1 - 5 = \boxed{-4}$$

Negative numbers using a number line:



$$-1 + 2 = \boxed{1}$$

Negative numbers using a number line:



$$-4 + 6 = \boxed{2}$$

Negative number sums:

$$2 - 6 = \underline{-4}$$

$$-7 - 7 = \underline{-14}$$

$$1 - 11 = \underline{-10}$$

$$15 - 15 = \underline{0}$$

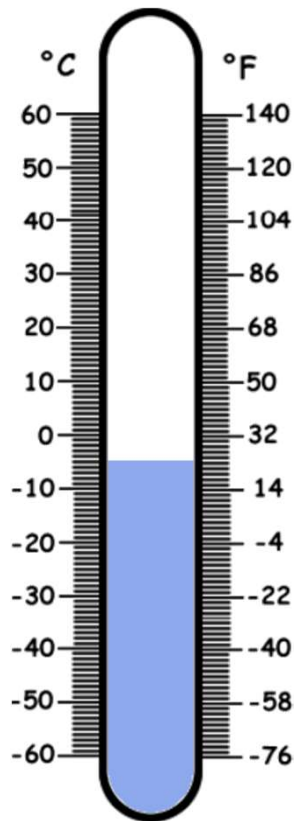
$$23 - 41 = \underline{-18}$$

$$1 - 34 = \underline{-33}$$

$$-2 + 8 = \underline{6}$$

$$-6 + 18 = \underline{12}$$

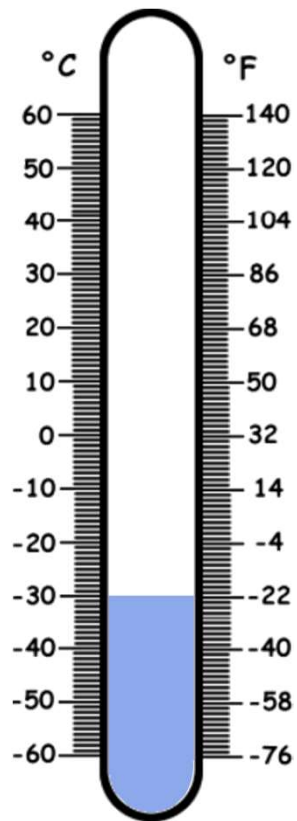
Read the thermometer



What is the temperature reading of the thermometer in Celsius?

The thermometer reading of the temperature in Celsius is - 5°C.

Read the thermometer

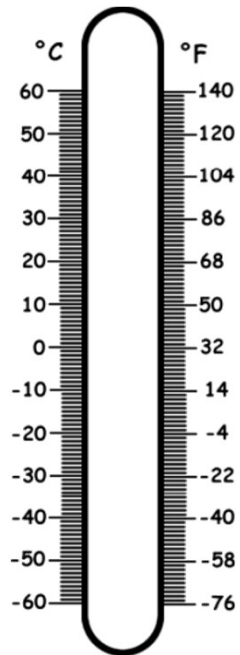


What is the temperature reading of the thermometer in Fahrenheit?

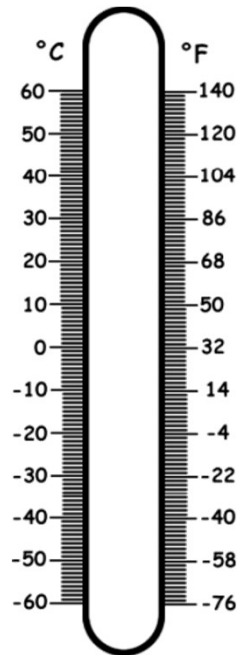
The thermometer reading of the temperature in Fahrenheit is - 22°F.

Colour the thermometer

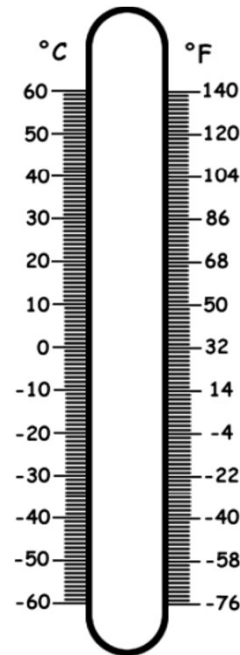
Colour each thermometer with the temperature beneath it.



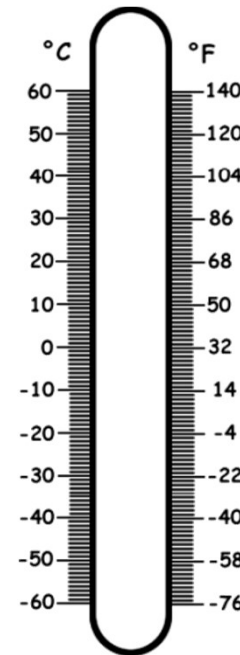
- 15°C



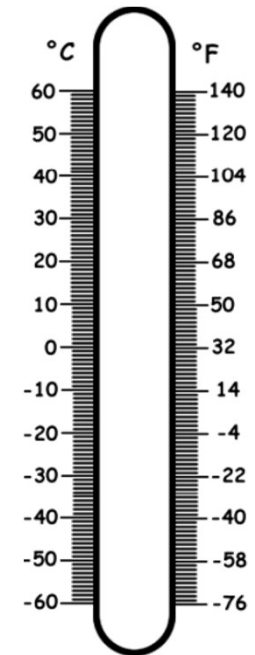
- 22°F



- 40°C



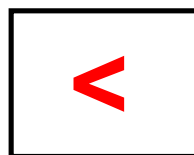
- 4°F



- 25°C

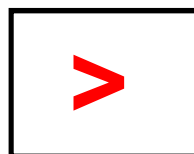
Use inequality signs (< = >)

- 12



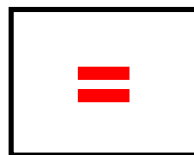
- 8

3



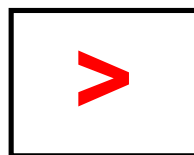
- 97

(23 - 40)



(28 - 45)

(5 x 6)



(- 57 + 8)

Negative numbers – Fill in the table

	+ 3	- 7	- 4	+ 50
- 8	- 5	- 15	- 12	42
- 10	- 7	- 17	- 14	40
- 38	- 35	- 45	- 42	12

Problem solving



Temperature A is 27°C
Temperature B is -14°C

What is the difference between the temperatures?

The difference between the two temperatures is 41°C .

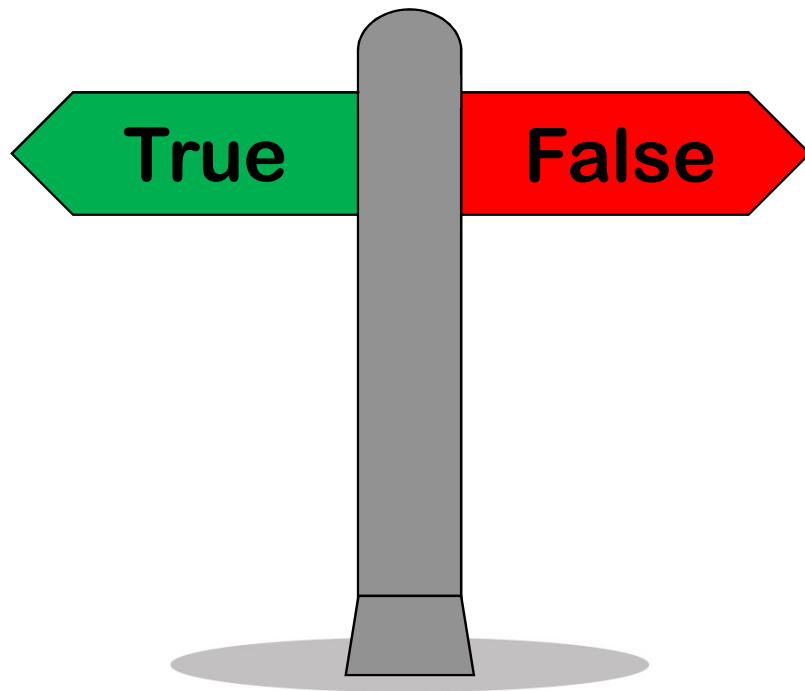
Problem solving



A cup of water that measured 60°C was placed in a freezer. It fell by 15 degrees every 15 minutes. How many minutes would it take to reach freezing point?

It would take 60 minutes for the cup of water to reach freezing point.

True or False?



Amanda says that if you counted on in steps of 17 from - 43, you would eventually reach 25.

Amanda is correct.
If you count on 4 steps of 17 from - 43, you will eventually reach 25.

$$(4 \times 17 = 68. -43 + 68 = 25)$$

Key Words Recap

Positive – A positive number is a number that is bigger than 0. A positive number can be written with a “+” symbol in front of it, or just as a number.

Negative – A negative number is a number that is less than zero. It is always written with a “-” symbol in front of the number.

Temperature – Temperature measures the warmth or coldness of an object. We use a thermometer to measure temperature.