INTERPRETING CHARTS
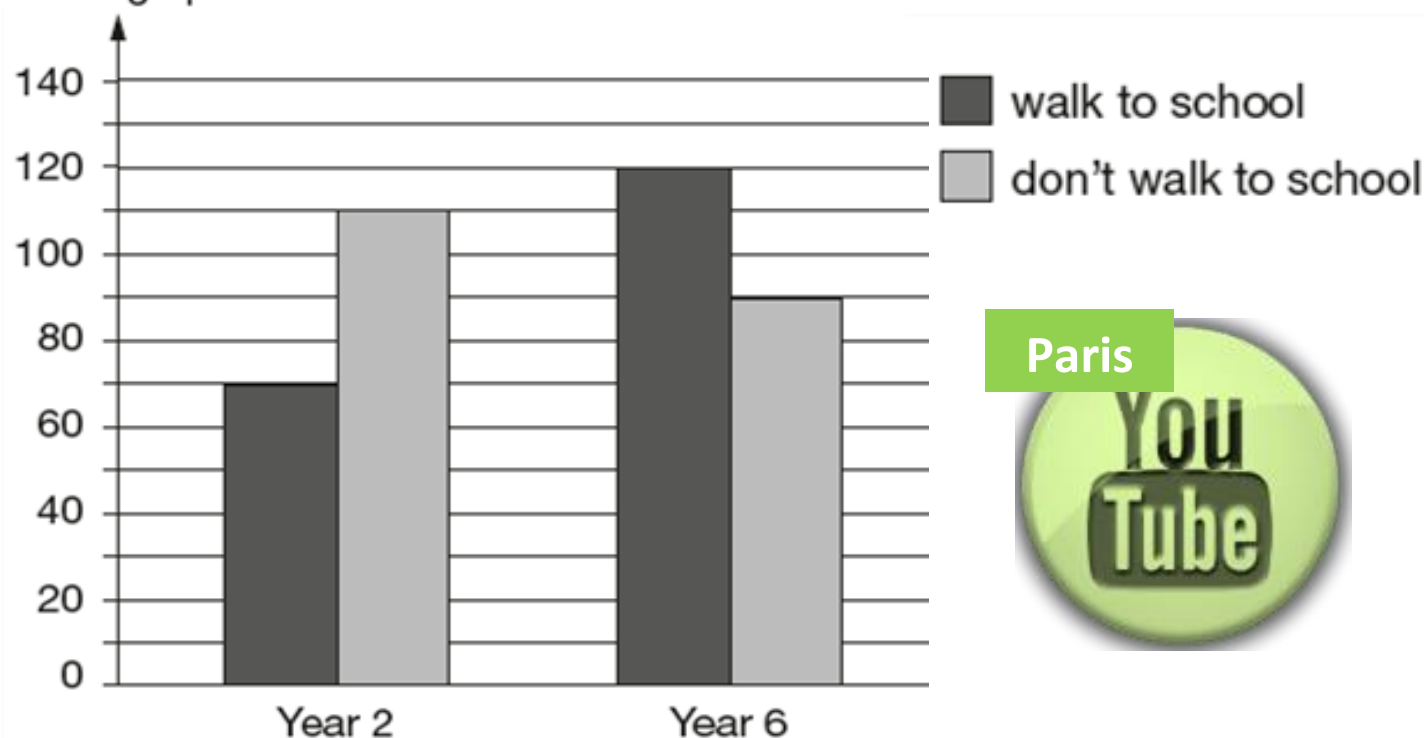
William asks the children in Year 2 and Year 6 if they walk to school.

This graph shows the results.

Legend:
- ■ walk to school
- ☐ don't walk to school

Paris

Altogether, how many children don't walk to school?

✏ 200

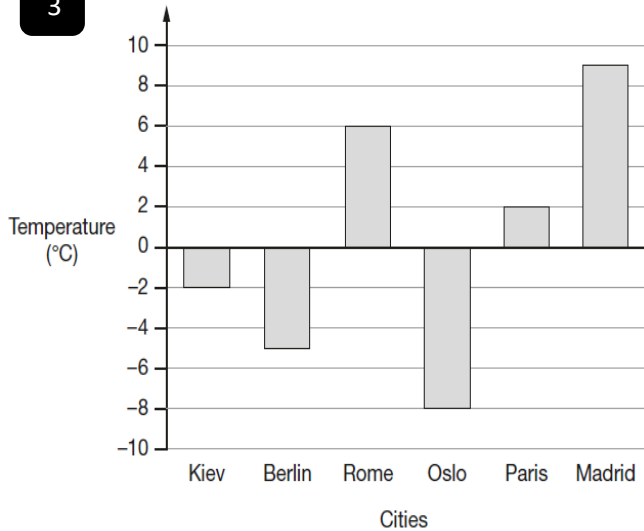**How many more Year 6 children than Year 2 children walk to school?**

✏ 50

I will do it ...
I can do it ...
I'll try to do it...
How do I do it ?
I want do it ...
I can't do it ...

SUCCESS!
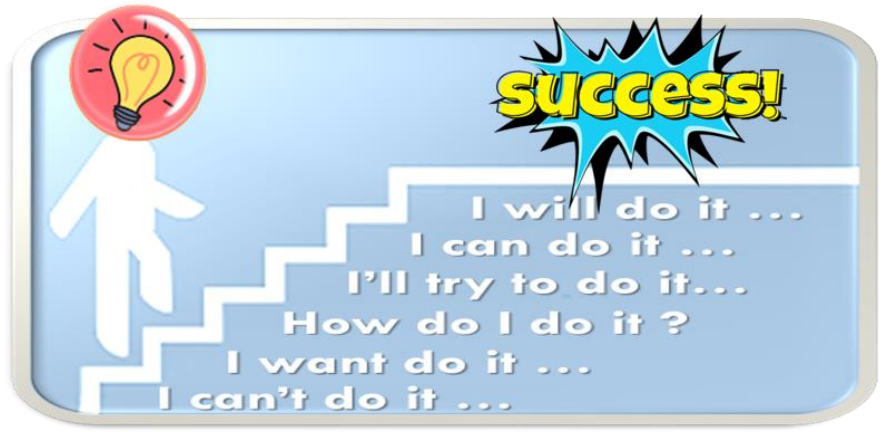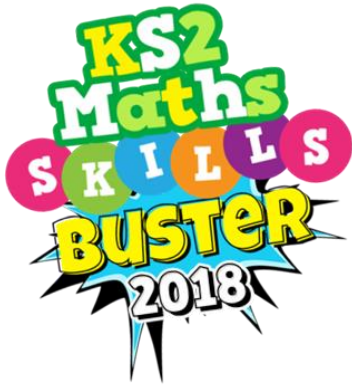
This graph shows the temperature in six cities on one day in January.

3

Temperature (°C)

Cities

Which city was 4 degrees **warmer** than Kiev?

Paris

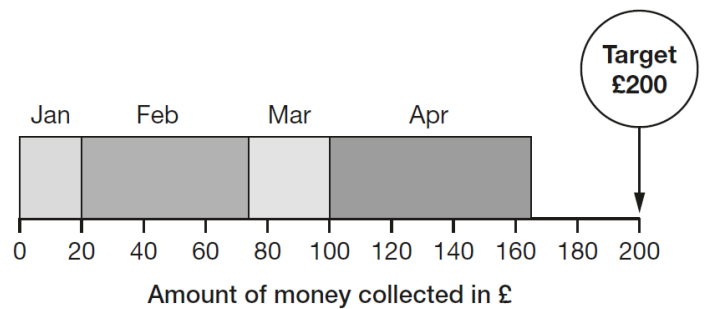What was the **difference** between the temperature in Oslo and the temperature in Berlin?

3 °C

4 A school plans to collect £200 between January and May.

This chart shows how much they collected by the end of April.

Target £200

Jan   Feb   Mar   Apr

0   20   40   60   80   100 120 140 160 180 200

Amount of money collected in £

Write the name of **each** month where they collected more than £50

Feb, Apr

How much money did they collect in February and March **altogether**?

£ **80**

9 Here is part of the bus timetable from Riverdale to Mott Haven.

Riverdale	10:02	10:12	10:31	10:48
Kingsbridge	10:11	10:21	10:38	10:55
Fordham	10:28	10:38	10:54	11:11
Tremont	10:36	10:44	11:00	11:17
Mott Haven	10:53	11:01	11:17	11:34

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?

46 minutes

Mr Evans is at Fordham at 10:30

What is the **earliest** time he can reach Tremont on the bus?

10:44 utes

2013A KS2 Q6

This diagram shows how nine people travel to work and how far away they live.

Key:
- ✘ walk
- ▲ bus
- ● cycle

H

C
I
E
Work
A
2km   4km   6km   8km
D
B
G
F
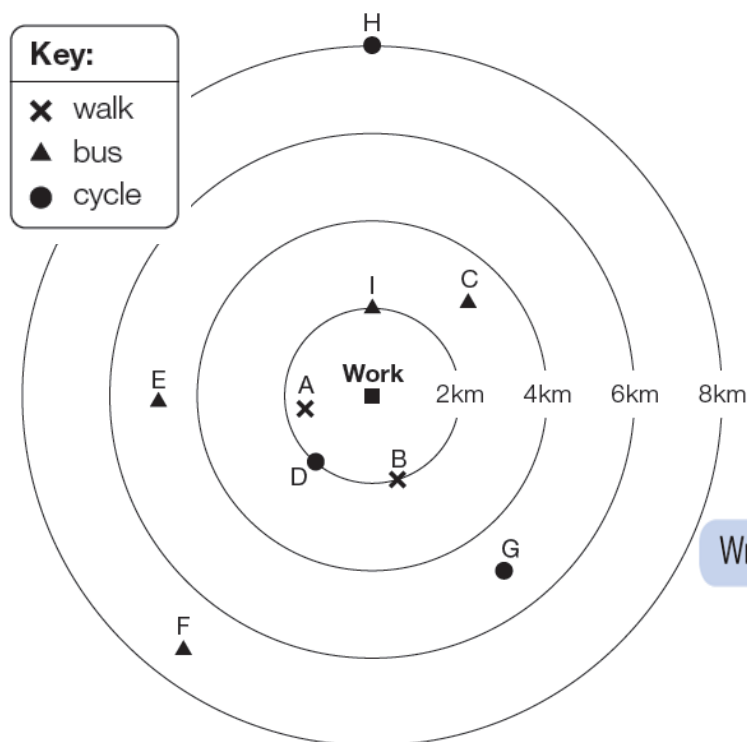
How many people live **more** than 4km from work?

4 people

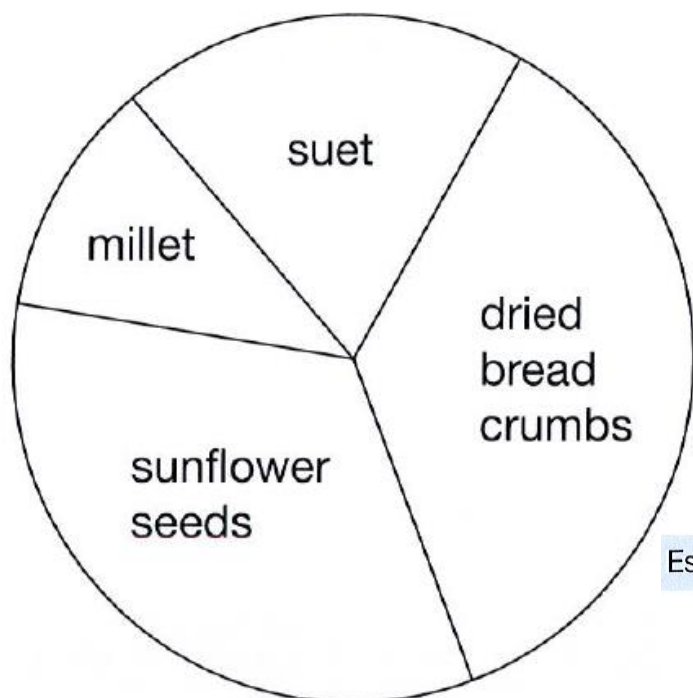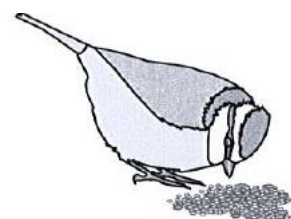How far from work does person **G** live?

5 km

Write the letter of the person who lives 2km from work and cycles.

D

2012A KS2 Q22

This pie chart shows the ingredients to make a food mixture for wild birds.

suet

millet

dried bread crumbs

sunflower seeds

Estimate the **percentage** of mixture that is suet.

20 %

Mina uses 100 grams of millet in the mixture.

Estimate how many grams of sunflower seeds she should use.

300 g

Kirsty, Seb, Mina, Jack and Donna belong to a sports club.

This table shows the sports they do in one week.

	Mon	Tues	Wed	Thurs	Fri
Swimming	Kirsty Jack		Jack	Kirsty Donna	Donna
Jogging	Seb	Mina			Mina Kirsty Jack
Cycling		Kirsty Donna		Jack	Seb

How many of the children do **not** go swimming?

✏️ **2**

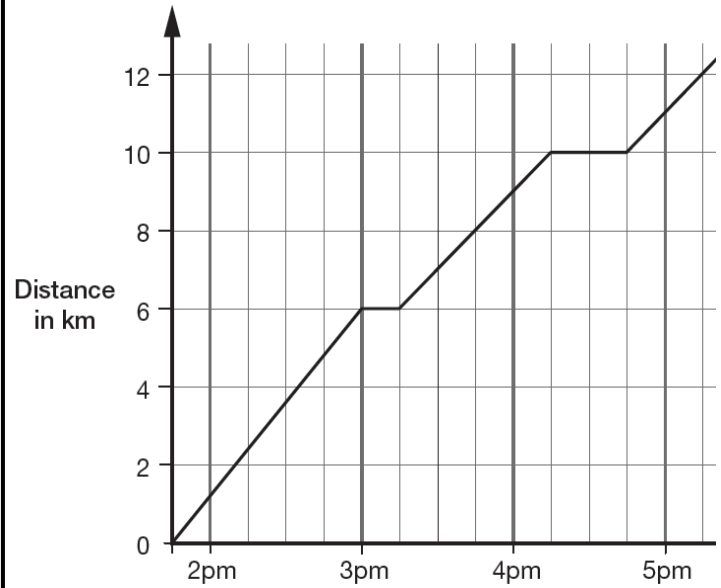Write the names of all the children who go **both** jogging **and** cycling.

✏️ **Seb, Kirsty, Jack**

This graph shows the distance Alfie and Chen walked in an afternoon. They started at 1:45pm and had two breaks.

How many kilometres did they walk **between** the first and second breaks?

✏️ **4** km

At what time did Alfie and Chen start their second break?

✏️ **4:15**

Class 6 collect litter from a park.

This chart shows some of the litter they have collected so far.

How many bottles have Class 6 collected? ✏️ **450**

						Key	
bottles	🍾	🍾	🍾	🍾	🍾	🍾 = 100 bottles	
cans	🥫	🥫	🥫			🥫 = 100 cans	
bags	▦	▦	▦	▦	▪	▦ = 100 bags	

How many **more** bags than cans have they collected? ✏️ **125**

Holly says,

'One-third of this shape is shaded'.

Is Holly correct?
Circle **Yes** or **No**.

Yes   No

Explain how you know.

Because...if you put the two grey triangles together it would make a total of one whole grey square out of 3 squares. 1 out of 3 is a third.
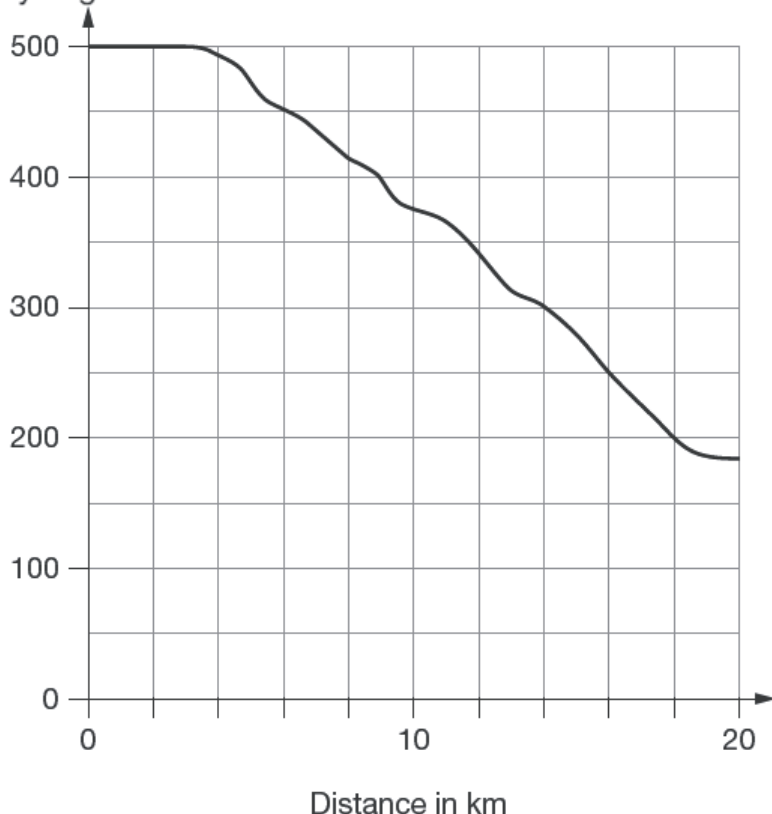
This chart shows the favourite snacks of some boys and girls.

Number of children
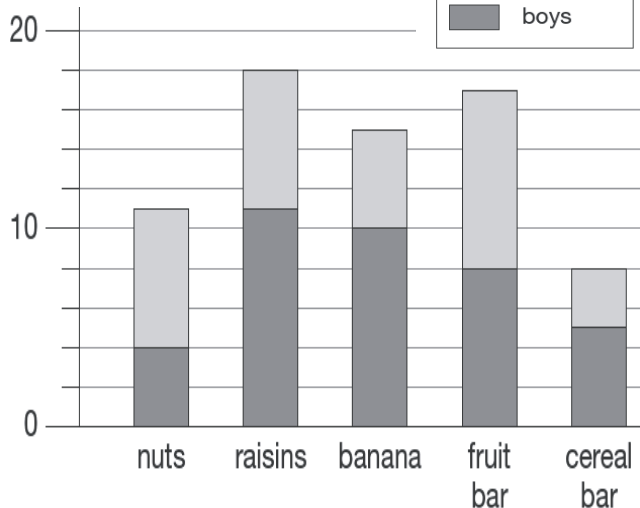
girls
boys

Snack

How many snacks were chosen by more girls than boys?

2

How many more boys than girls chose raisins?

4

Which snack was chosen by twice as many boys as girls?

50

500 children started a 20 kilometre sponsored cycle ride.

This graph shows how far they cycled.

Number of children cycling

Distance in km

At what distance were exactly half of the children still cycling?

16 km

Estimate how many children completed the 20 kilometre cycle ride

180-185

This table shows six different types of cat and where they are found in the world.

	Europe and Middle East	Asia	Africa
Jungle cat	✓	✓	✗
Wildcat	✓	✓	✓
Tiger	✗	✓	✗
Lion	✗	✓	✓
Cheetah	✗	✗	✓
Leopard	✓	✓	✓

Use this table to answer these questions.

Which type of cat is found **only** in Africa?

cheetah

Which types of cat are found in all three parts of the world?

wildcat, leopard

A shop sells books, CDs and DVDs.

A shop sells books, CDs and DVDs.

This pie chart shows the sales of each in one week.

Estimate the **fraction** of the total sales that were DVDs.

1/5 or 1/6

In this week, 200 **CDs** were sold.

Estimate how many books were sold.

600

This graph shows the age of players at a football club.

Number of players
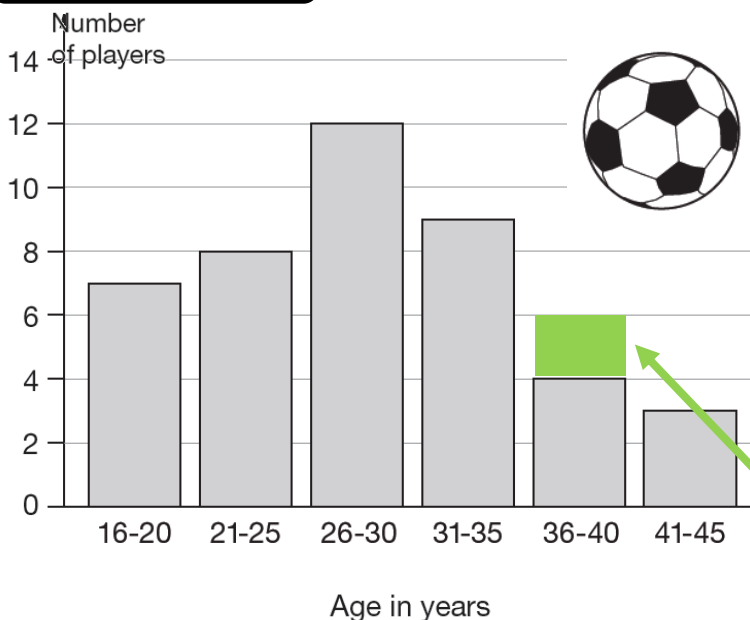
How many players are aged 30 or younger?

27

A player aged 36 and a player aged 39 join the club.

Add this information to the graph above.

This table shows where 100 people went on holiday in 2007 and 2008.

	2007	2008
Spain	18	26
England	38	17
Scotland	21	13
Wales	19	28
USA	4	16

Look at the table.
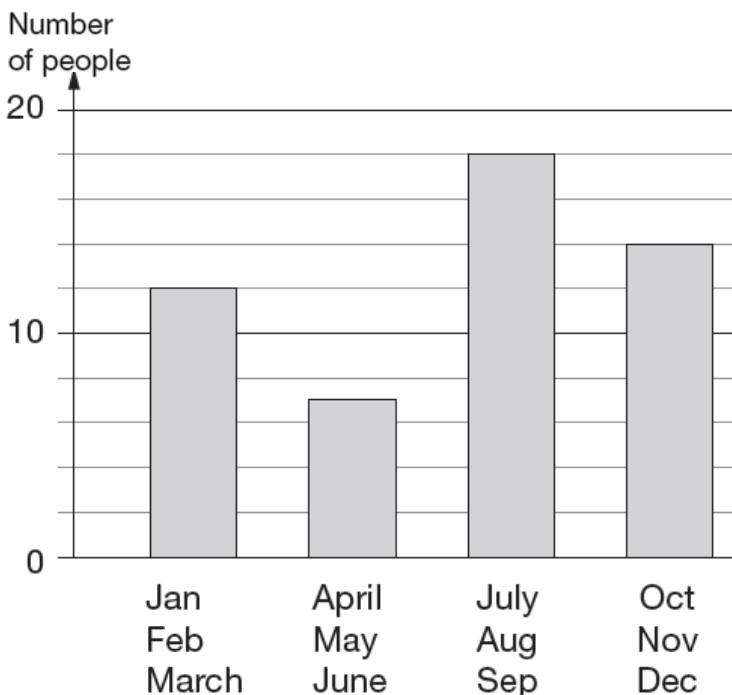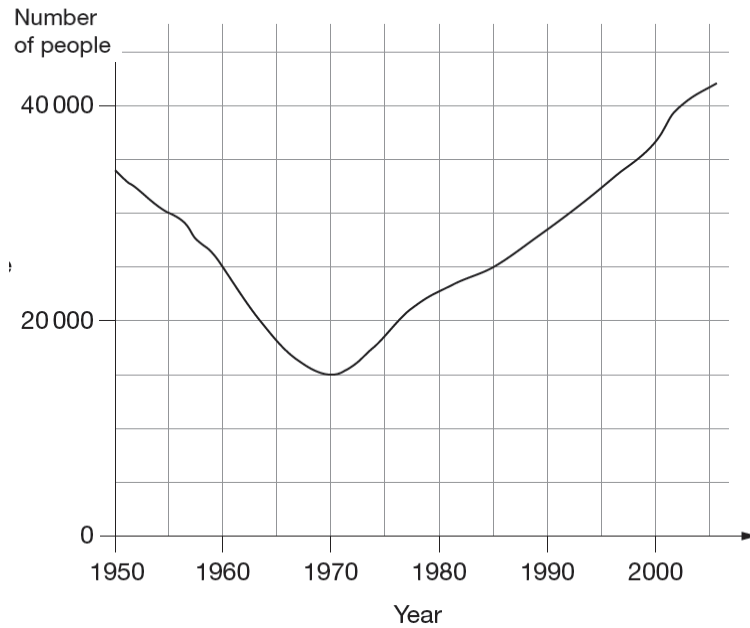
How many **more** people went to Wales than to Scotland in 2008?

15

Class 6 did a survey of birthday dates.

This chart shows the number of people with birthdays in each three months of the year.

Number of people

20

10

0

| Jan Feb March | April May June | July Aug Sep | Oct Nov Dec |

This graph shows the number of people living in a town.

Number of people

40 000

20 000

0

1950   1960   1970   1980   1990   2000

Year

Look at the graph.

How many people lived in the town in 1985?

25,000

In which year was the number of people the same as in 1950?

1996
1997

Find the year when the number of people first went below 20 000

1963
1964

From the chart, how many people have a birthday before July?

19

Nobody has a birthday in October.

Six people have a birthday in November.

How many people have a birthday in December?

8

Park School collects money for three charities.
This pictogram shows how much they have collected.

 stands for £100

🐬 Save Dolphins	⊗	⊗	⊗	◁	
🦅 Wildwatch	⊗	⊗	◊		
🌳 Plant-a-Tree	⊗	⊗	⊗		

How much more have they collected for Save Dolphins than Plant-a-Tree?

£ **50**

The target for Wildwatch is £500

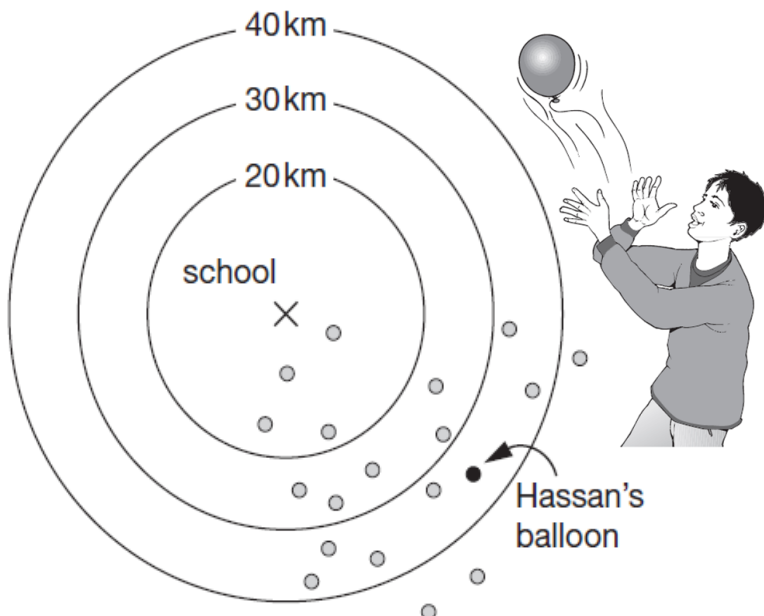How much **more** money do they need to collect for Wildwatch?

£ **275**

Class 6 launched some balloons at a school fete.

This diagram shows how far some of the balloons travelled.

40 km
30 km
20 km
school
×

Hassan's balloon

How many balloons on the diagram travelled between 20 km and 30 km?

5

Estimate how far Hassan's balloon travelled.

35 km

The chart shows the number of sunny days and the number of windy days in six months.

Number of days

□ sunny days
■ windy days

30
20
10
0

May   June   July   Aug   Sept   Oct
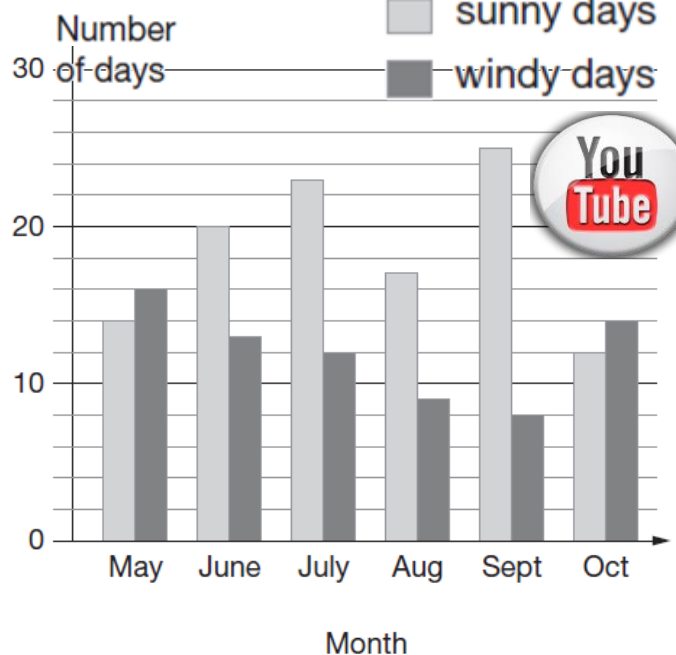
Month

Which months had more windy days than sunny days?

May October

How many months had more than 15 sunny days?

4

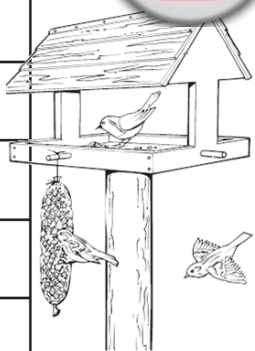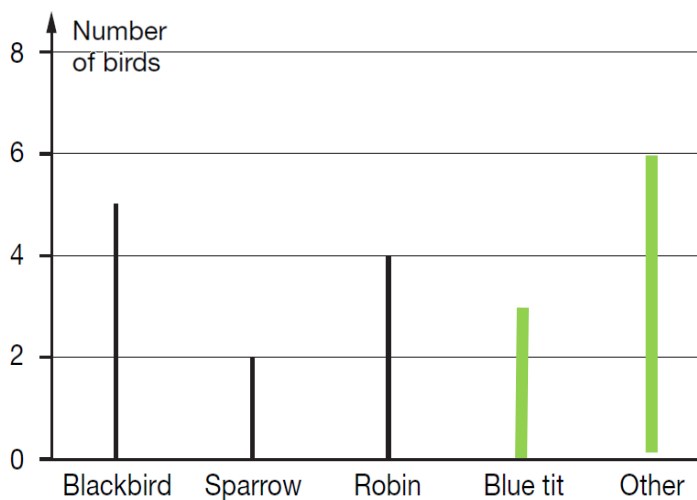How many more sunny days than windy days were there in **June**?

7

Rosie collects data about birds visiting a bird table.

Here are her results.

Blackbird	⊬⊬⊬
Sparrow	‖
Robin	‖‖
Blue tit	‖‖
Other	⊬⊬ ‖

Draw **two** more lines to complete the graph.
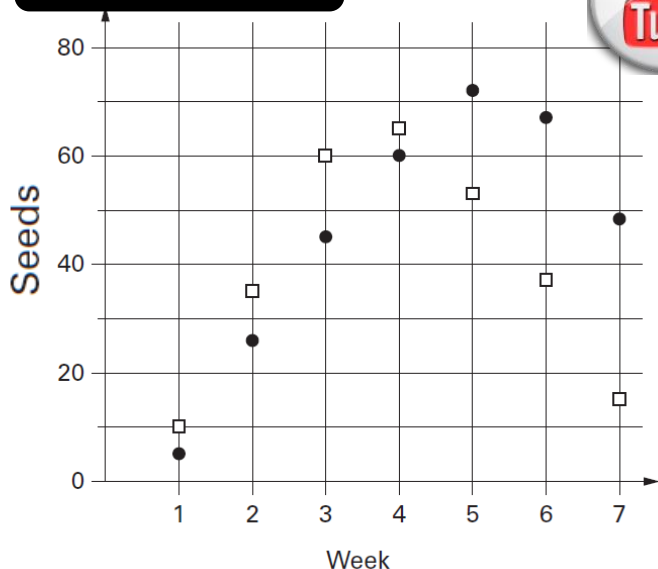
Number of birds

Blackbird Sparrow Robin Blue tit Other

Rosie saw **20 birds** altogether.

What **fraction** of the birds were blackbirds?

5/20 or 1/4

This chart shows the number of books some children read last month.

Number of children

1 to 3   4 to 6   7 to 9   10 to 12   13 or more

Number of books
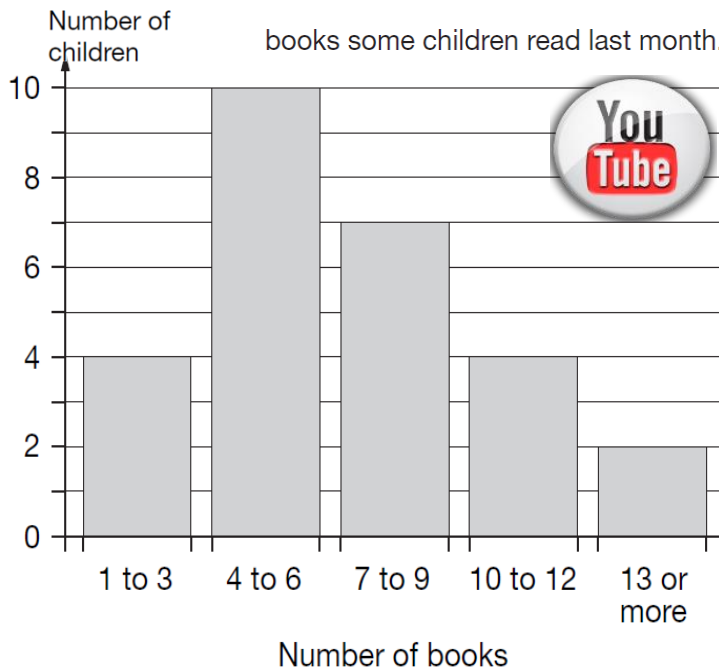
How many children altogether read **more than 9 books**?

6

7 children read 4 books.
1 child read 5 books.

Lin says,

'That means 2 children read 6 books'.

Explain how she can work this out from the chart.

Discuss how high the 4-6 bar is and what else needs to be added to 7 and 1 to make the bar

Seeds

Week

Class 6 count how many seeds they find under two trees.
They show the data in a graph.

How many seeds did they find in week 3 **altogether**?

□ oak
● chestnut

105 seeds

In **how many weeks** did they find more than 40 **chestnut** seeds?

5 weeks

Abbie takes the temperature outside at midday on the first day of each month.

The graph shows her results from January to December.
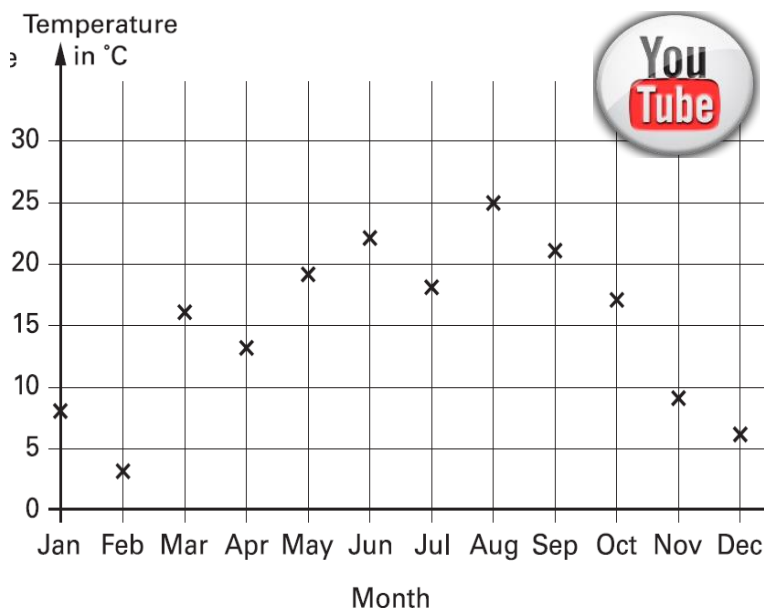
Temperature in °C

How many months on the graph show a temperature **between 10°C and 20°C**?

5

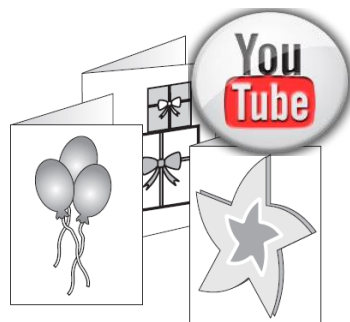Find the difference in temperature shown on the graph between **July** and **August**.

7 degrees

A shop sells greetings cards.

Each card has a price code on it.

These are the codes.

code	price
AA	75p
BB	£1.15
CC	£1.55
DD	£1.70
EE	£1.99

Tina buys two cards.

One card has code **AA** on it.
The other card has code **DD** on it.

How much does Tina pay?

£ **2.45**

Omar buys a card. He pays with a £2 coin.

He gets 45p change.

What is the **code** on his card?

CC

Some children ran in two races on sports day. Here are their times.

	100m race	800m race
Elise	15.9 seconds	3 minutes 02 seconds
Jake	19.7 seconds	2 minutes 58 seconds
Teri	16.8 seconds	3 minutes 01 seconds
Neil	17.1 seconds	2 minutes 59 seconds
Barry	18.4 seconds	2 minutes 57 seconds

Who finished the 100m race in **second** place?

Teri

In the 800m race, how many seconds did Barry finish ahead of Elise?

5 seconds

This table shows how many journeys a taxi driver made on five days and how much money he collected.

	number of journeys	money collected
Monday	23	£85
Tuesday	36	£112
Wednesday	18	£69
Thursday	31	£124
Friday	35	£109

How much money did he collect on the day that he made the most journeys?

£ **112**

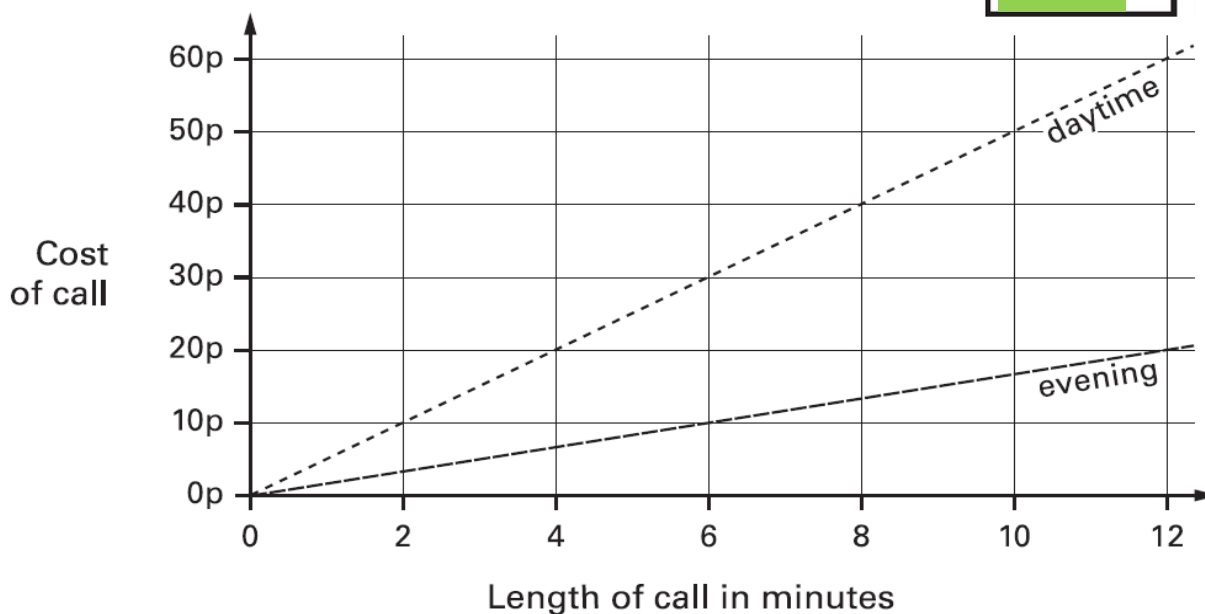How much more money did he collect on Monday than on Wednesday?

£ **16**

This graph shows the cost of phone calls in the daytime and in the evening.

How much does it cost to make a **9 minute** call in the **daytime**?

45 p

How much **more** does it cost to make a **6 minute** call in the **daytime** than in the **evening**?
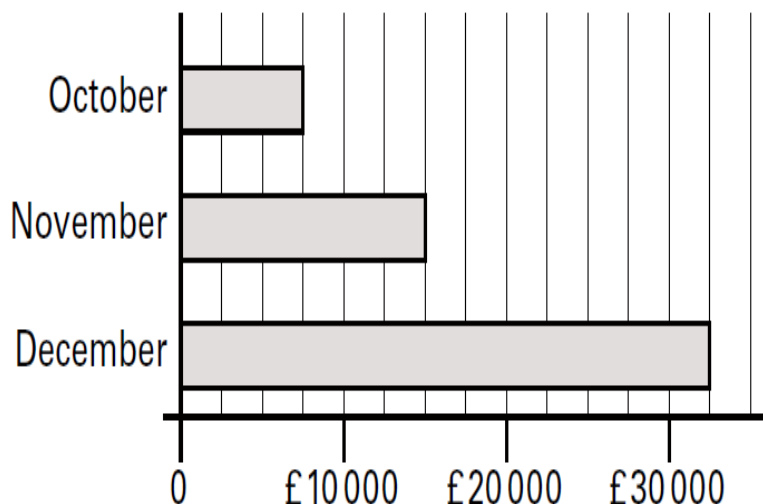
20 p

Cost of call

Length of call in minutes

How much **more** money was spent in the shop in **December** than in **November**?

£ 17,500

Stepan says,

'In November there was a 100% increase on the money spent in October'.

Is he correct?
Circle Yes or No.

Yes / No

Explain how you can tell from the chart.

Discuss how the amount from November is double October's amount, and doubling is a 100% increase.

This chart shows the amount of money spent in a toy shop in three months.

October

November

December

0   £10000   £20000   £30000

This table shows the increase in bus fares.

Bus Fares	
old fare	new fare
42p	48p
52p	57p
60p	72p
75p	85p
90p	£1.05
£1.20	£1.28
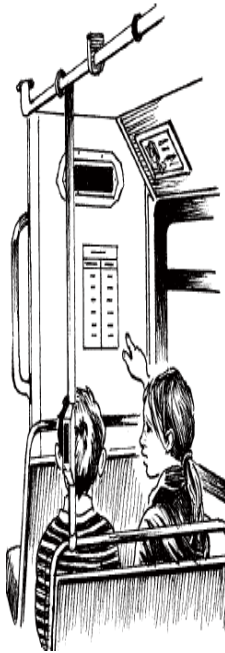
Sohan's **new** bus fare is **72p**.

How much has his bus fare gone up? **12** p

Millie says,

'My bus fare has gone up by 10p'.

How much is Millie's **new** bus fare?

85p

A camping shop sells **tents**, **sleeping bags** and **backpacks**.
This chart shows how many of each they sold in June.

Items sold in June

The shop had **20** sleeping bags at the **beginning of June.**

How many of these sleeping bags did the shop have left at the **end of June**?

5

In **July**, the shop sold **three times as many tents** as in June.

How many tents did the shop sell in **July**?

18

	May	June	July
walking	25	80	75
sailing	15	42	50
climbing	18	27	23

This table shows the numbers of children who went walking, sailing or climbing at an outdoor centre.

How many children went **sailing** in **May, June and July** altogether?

107

How many **more** children went **walking** in **June** than **climbing** in **June**?

53