Line graphs

Grade 2 | Worked solutions

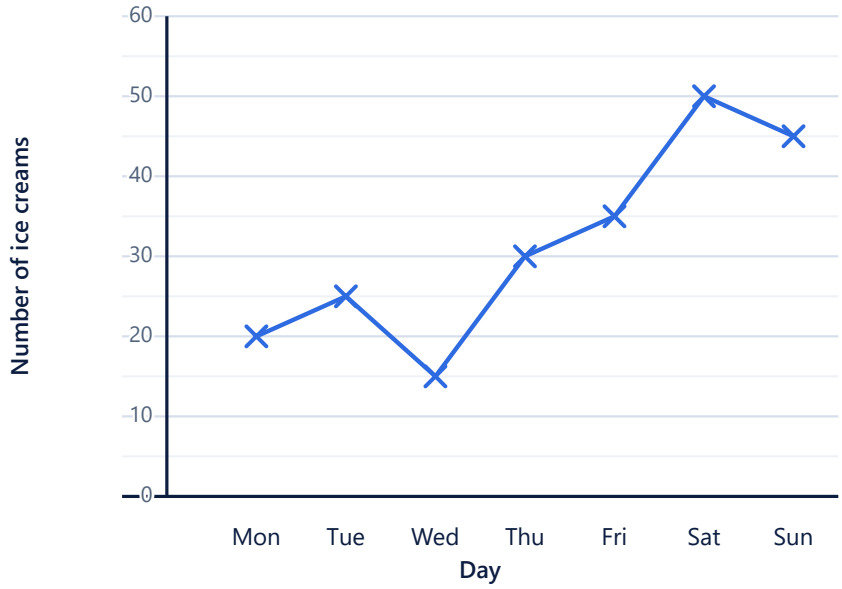
GCSE Statistics topic practice

1 The line graph shows the number of ice creams a kiosk sold each day for one week.

a. How many ice creams were sold on Thursday? (1)

b. On which day were the fewest ice creams sold? (1)

c. How many more ice creams were sold on Saturday than on Monday? (1)



(3 marks)

a) go up from Thu to the line, then across

30 ice creams

b) the lowest point on the graph

Wednesday

c) Saturday is 50, Monday is 20

50 - 20 = 30

a) 30 b) Wednesday c) 30

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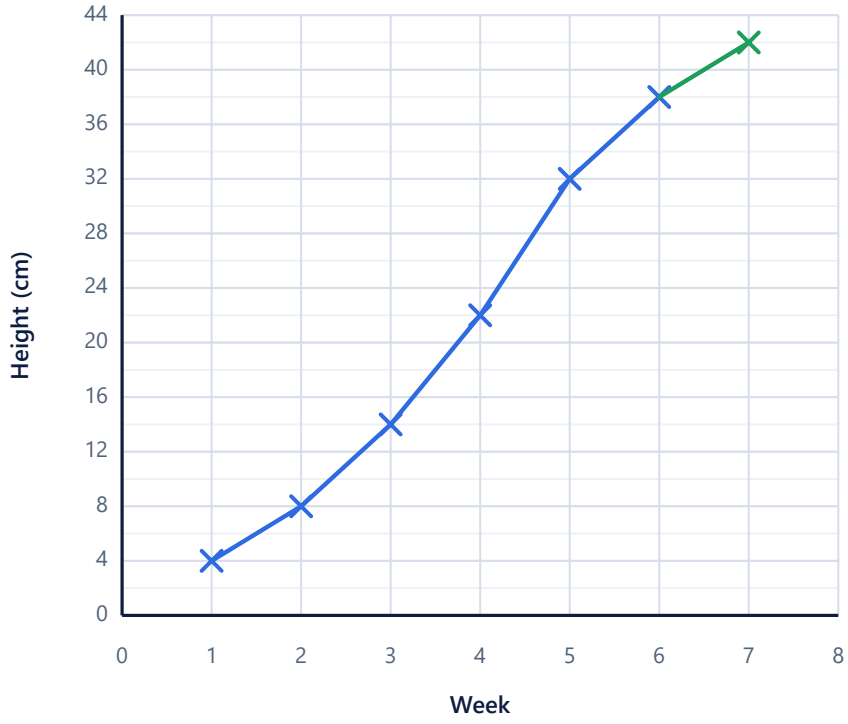
2 Farid measures the height of a sunflower at the end of each week. The line graph shows his results for the first 6 weeks.

a. Write down the height of the sunflower at the end of week 3. (1)

b. Between which two weeks did the sunflower grow the most? (1)

c. At the end of week 7 the height was 42 cm. Plot this point and complete the line graph. (1)

d. Describe how the growth of the sunflower changed after week 5. (1)



(4 marks)

a) up from week 3, then across

14 cm

b) look for the steepest part of the line

32 - 22 = 10

It grew 10 cm from week 4 to week 5

c)

Plot a cross at (7, 42)

Join it to (6, 38) with a ruler

d)

After week 5 the line is less steep

It grew 6 cm, then only 4 cm

The growth slowed down

a) 14 cm b) week 4 to week 5 c) (7, 42) d) it slowed down

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3 The table shows the number of visitors to a school website in each of six months.

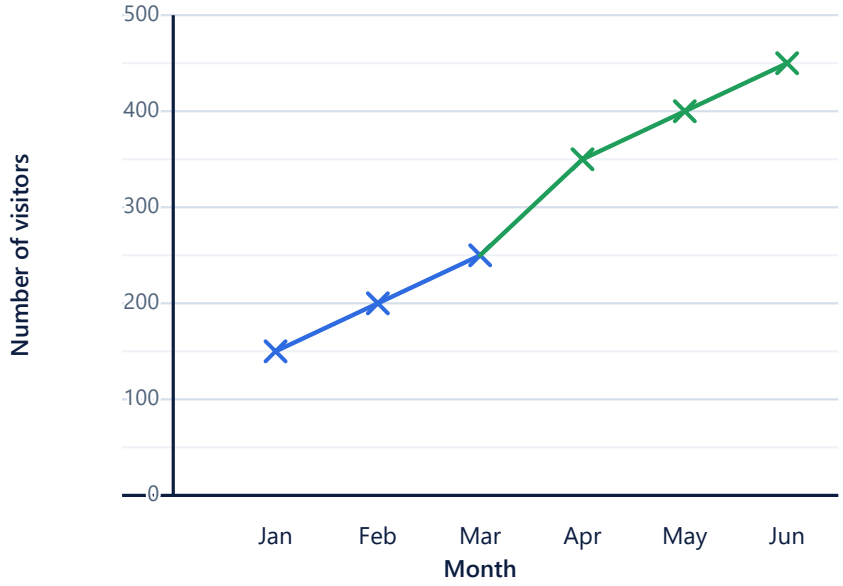
Month	Jan	Feb	Mar	Apr	May	Jun
Visitors	150	200	250	350	400	450

The first three points have been plotted on the line graph.

a. Complete the line graph. (2)

b. Describe the trend in the number of visitors. (1)

c. Between which two months was the increase in visitors the greatest? (1)



(4 marks)

a) each small step on the axis is 50 visitors

Plot crosses at Apr 350, May 400, Jun 450

Join the points with straight lines

b)

The number of visitors goes up every month

c) Look for the steepest part of the line

350 − 250 = 100

March to April, an increase of 100

a) 350, 400, 450 plotted b) increasing c) Mar to Apr

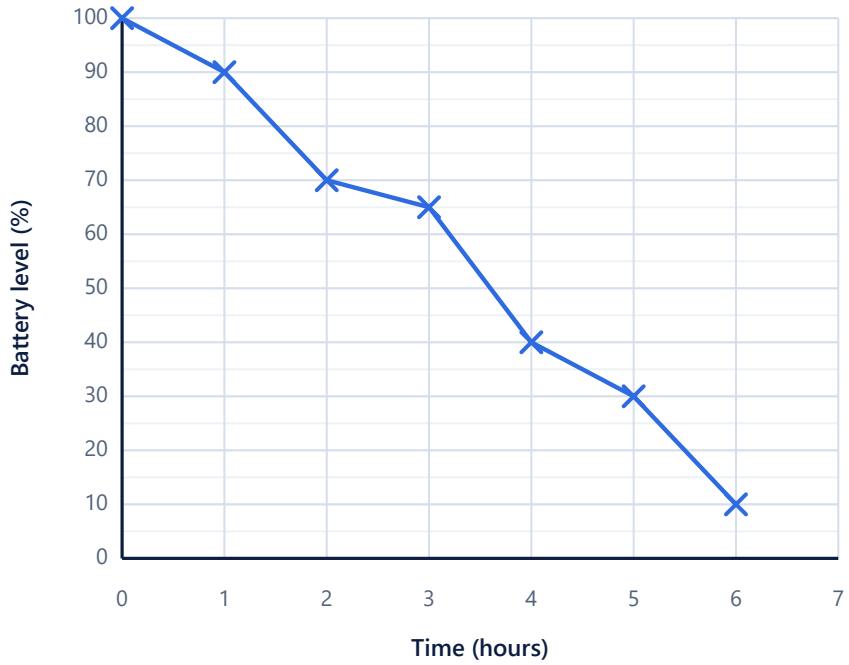
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4 Kai charges his phone to 100%. He then records the battery level every hour. The line graph shows his results.

a. Write down the battery level after 3 hours. (1)

b. In which hour did the battery level fall the most? (1)

c. Kai says, "My phone will have no battery left after 7 hours."
Does the graph support what Kai says? Give a reason for your answer. (2)



(4 marks)

a) up from 3 hours, then across

65%

b) look for the steepest part of the line

65 - 40 = 25

It fell 25% between 3 hours and 4 hours

c) fall in the last hour

30 - 10 = 20

Only 10% is left after 6 hours

It fell 20% in the last hour, more than 10%

Yes, the graph supports Kai

a) 65% b) 3 hours to 4 hours c) Yes, only 10% left

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5 The line graph shows the number of members of a chess club at the start of each year from 2020 to 2024.

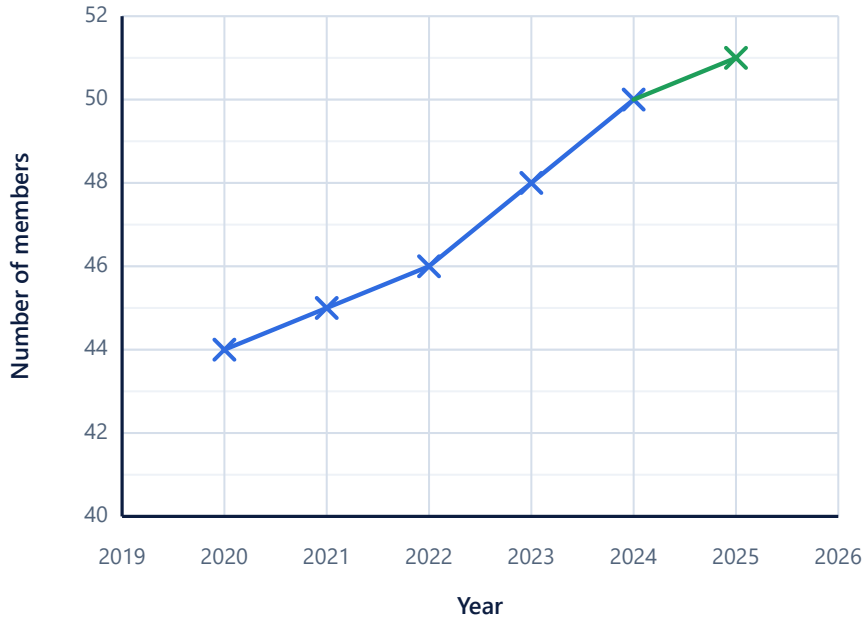
a. Write down the number of members in 2022. (1)

b. Work out the increase in the number of members from 2020 to 2024. (1)

c. In 2025 the club had 51 members. Plot this point and complete the line graph. (1)

d. Describe the trend in the number of members. (1)

e. The club puts this graph on a poster with the heading "Our membership has shot up!" Give one reason why the graph could be misleading. (1)



(5 marks)

a) up from 2022, then across

46 members

b) 2024 is 50, 2020 is 44

50 - 44 = 6

c)

Plot a cross at (2025, 51)

Join it to (2024, 50) with a ruler

d)

The number of members goes up every year

e)

The vertical axis starts at 40, not at 0

This makes the increase look bigger than it is

a) 46 b) 6 c) (2025, 51) d) increasing e) axis starts at 40

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