MEI®
Because maths matters!

Making Maths Relevant: Teaching GCSE Resit and Functional Skills through Finance

Sponsored by

CASIO®

Date: Thursday 2nd July 2026

Start time: 16:30 – 17:30

CAT VAN SARLOOS

Maths in Context Fan

SALLY DRURY

FE Maths Support Specialist

Discover creative ways to bring GCSE and Functional Skills topics to life using financial examples that connect directly to everyday choices, problem-solving, and decision-making. Leave with fresh ideas, ready-to-use activities, and the inspiration to help your students see maths in action.

01. Why finance?

02. Modelling an activity

03. Focused 15

04. Creating an activity

Why finance?

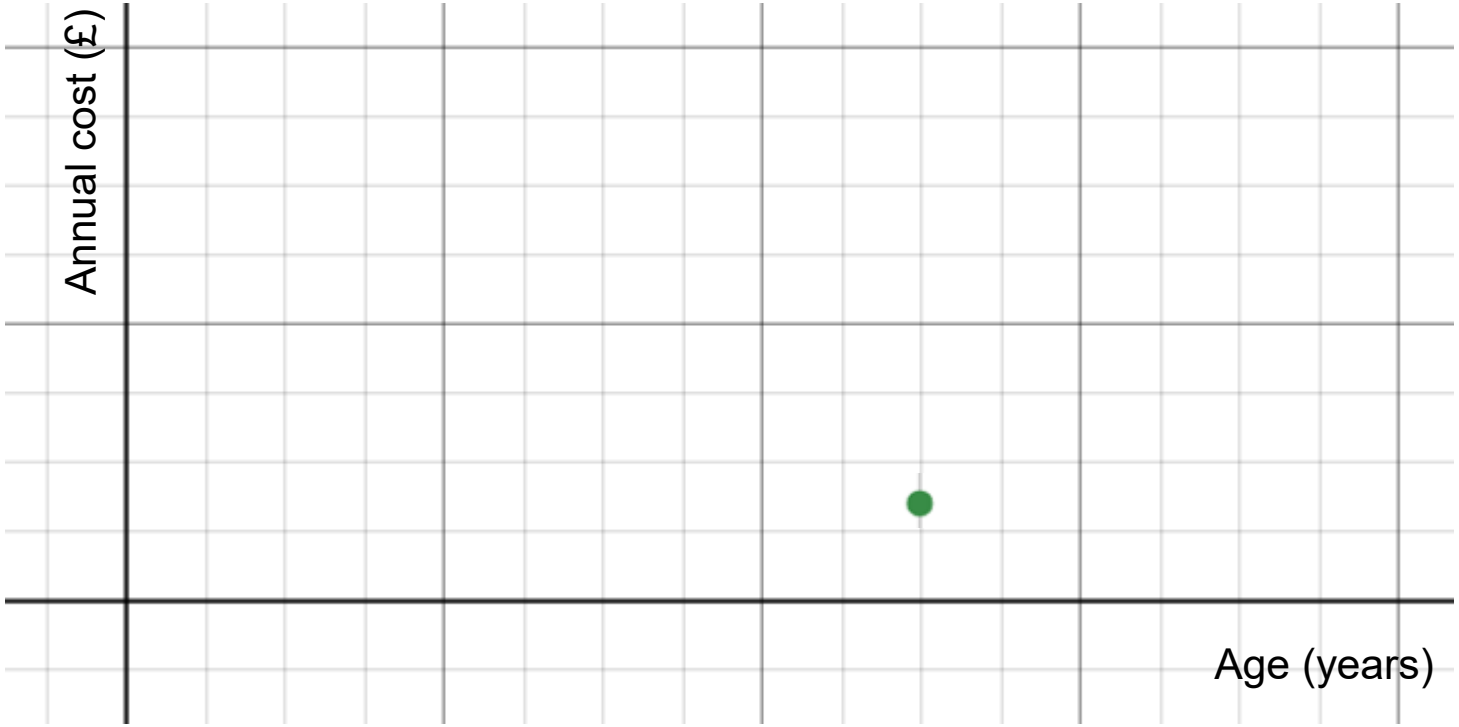
“Need to focus on changing classroom cultures towards new norms of discussion involving questioning, sharing and evaluating ideas in order to support new understandings of mathematics and encourage students to take ownership of the subject.”

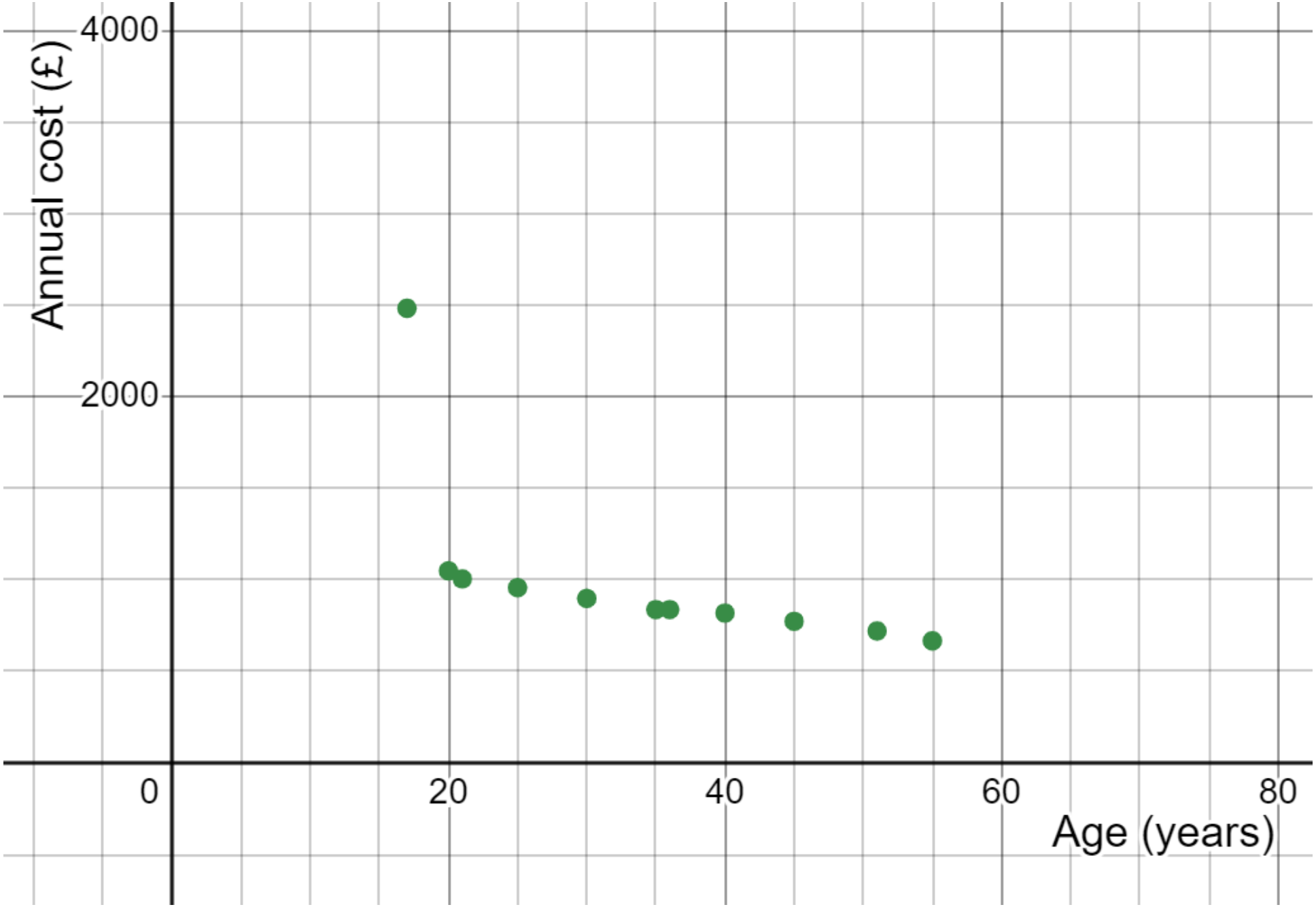
Modelling an activity

Car insurance

I collected some data on people's annual insurance costs and their age.

What do you expect to see?




Annual cost (£)
4000
2000
0
20
40
60
80
Age (years)

Group the cards

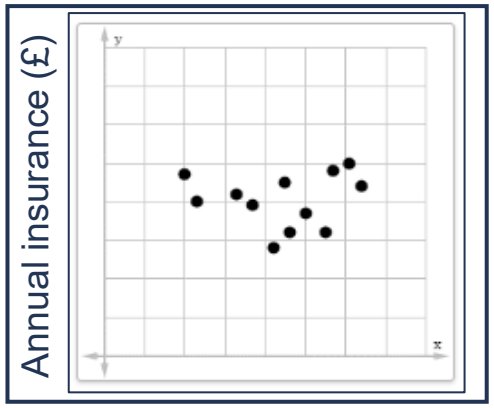
Negative correlation	No correlation	Positive correlation

Scatter graph sketch

x axis:

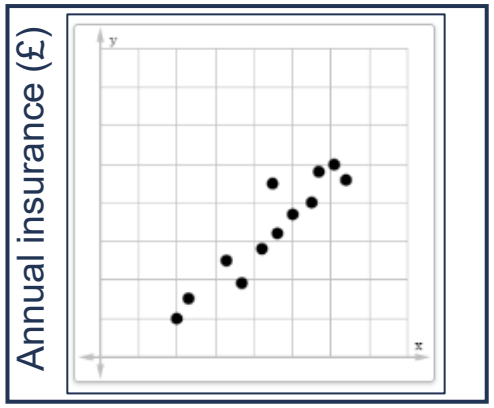
Min value:
Max value:

No correlation



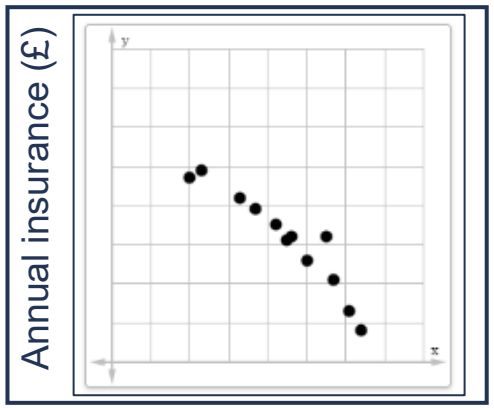
x axis:
Age of car

Positive correlation

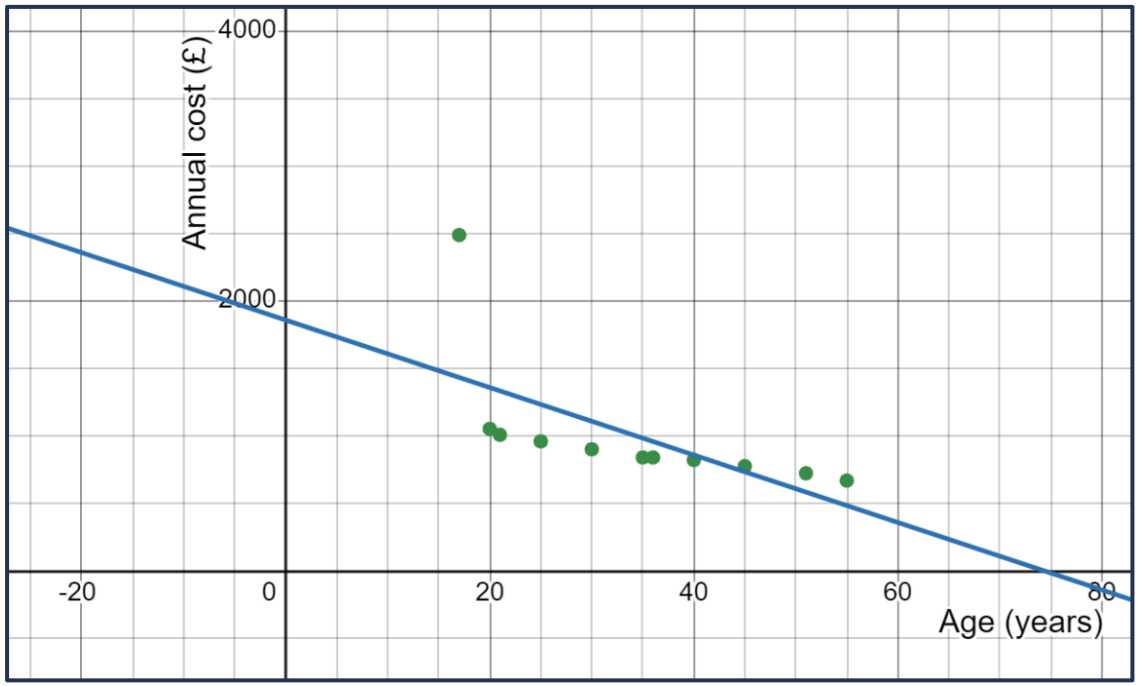


x axis:
Engine size

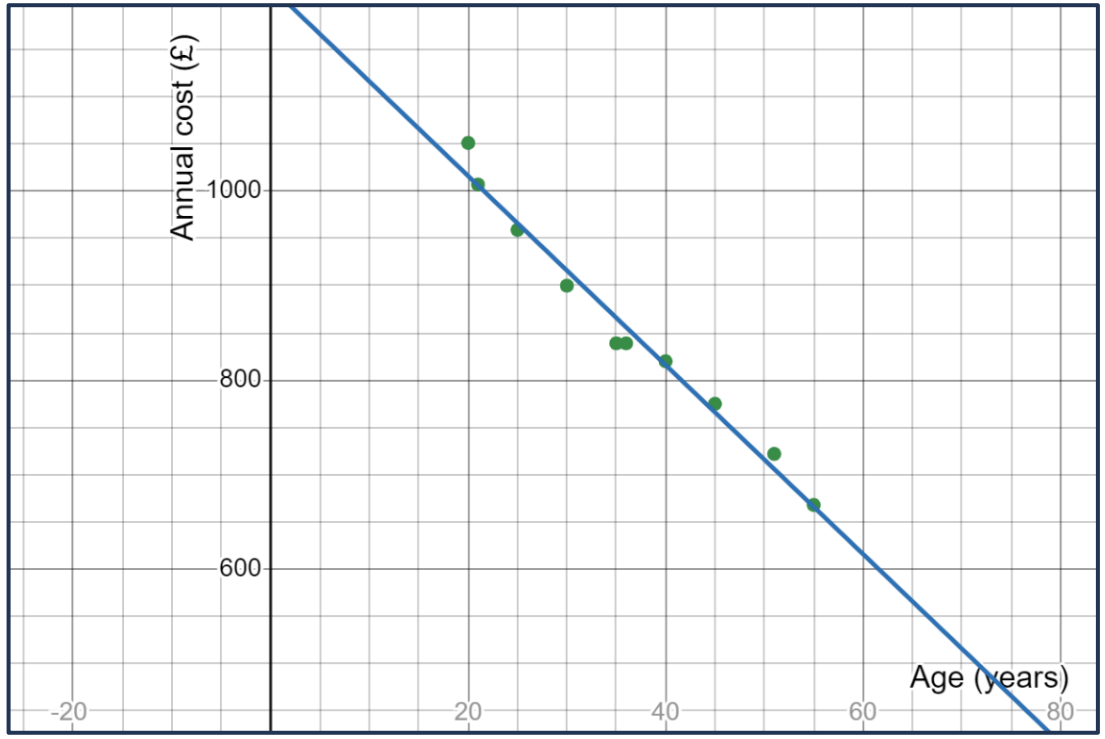
Negative correlation



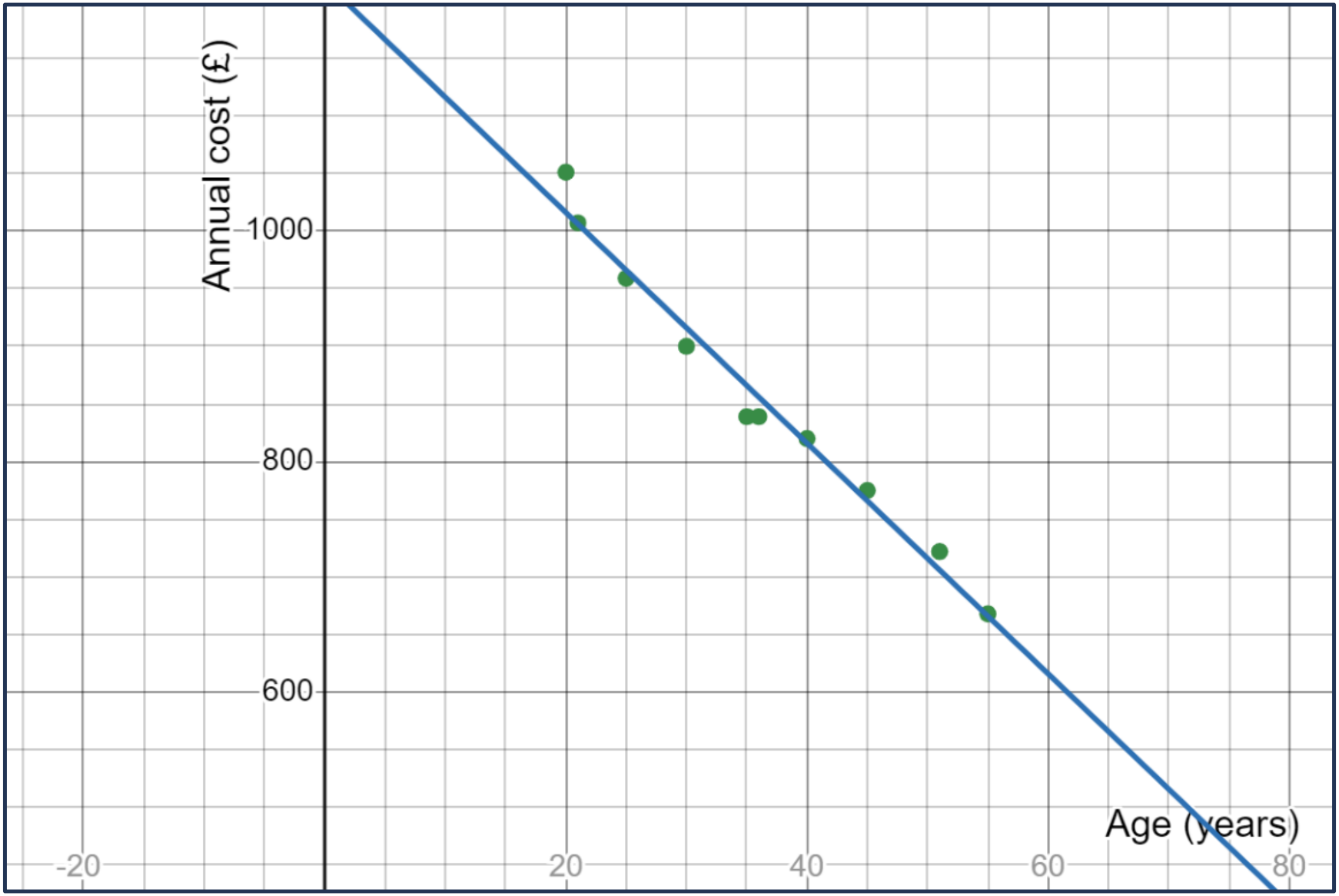
x axis:
Number of years of ‘no claims’ on insurance


Annual cost (£)
4000
2000
-20
0
20
40
60
80
Age (years)

A


Annual cost (£)
1000
800
600
-20
20
40
60
80
Age (years)

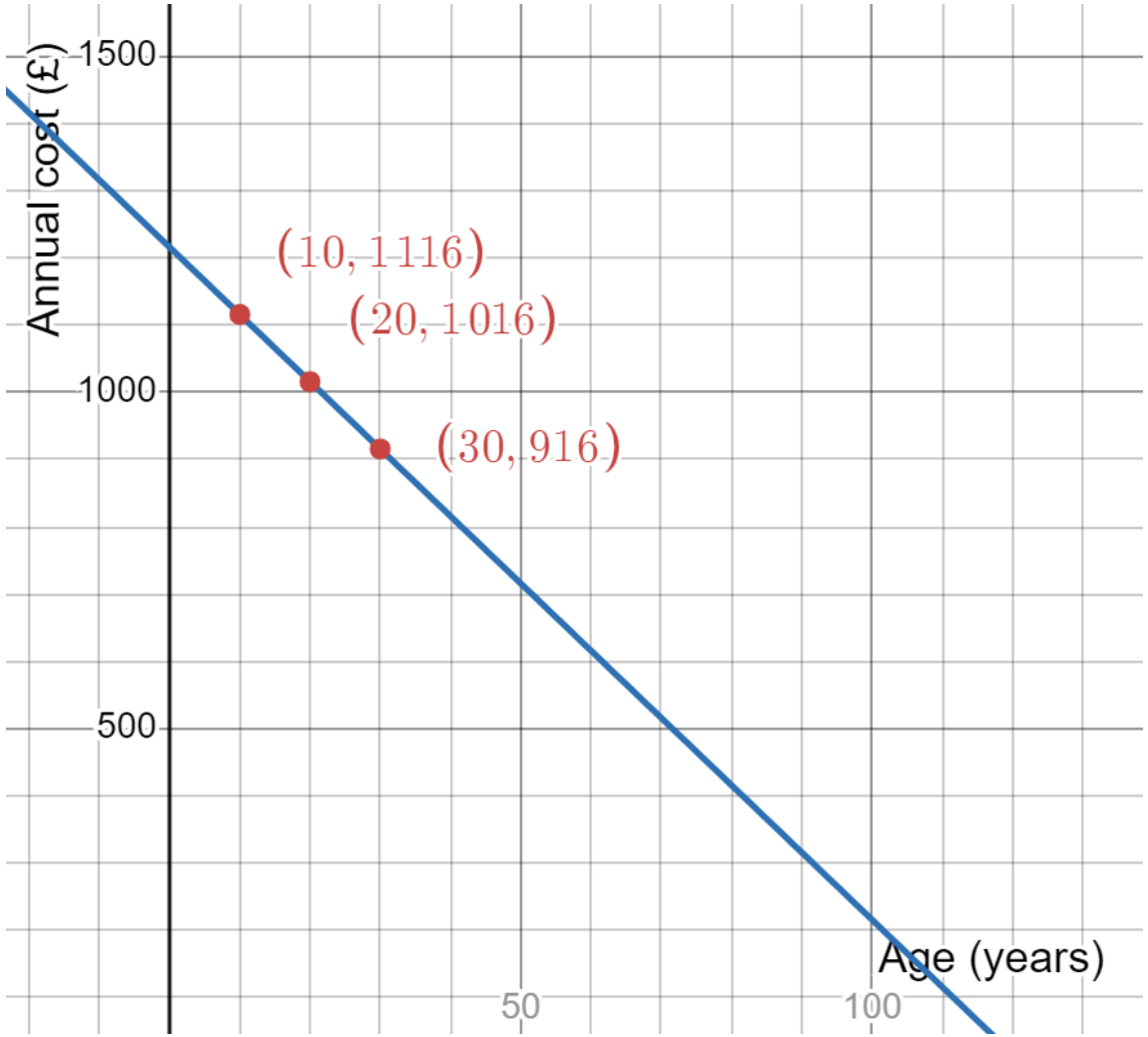
B


Annual cost (£)
1000
800
600
-20
20
40
60
80
Age (years)

Activity 1: Car insurance

Some coordinates which lie on the line have been added.

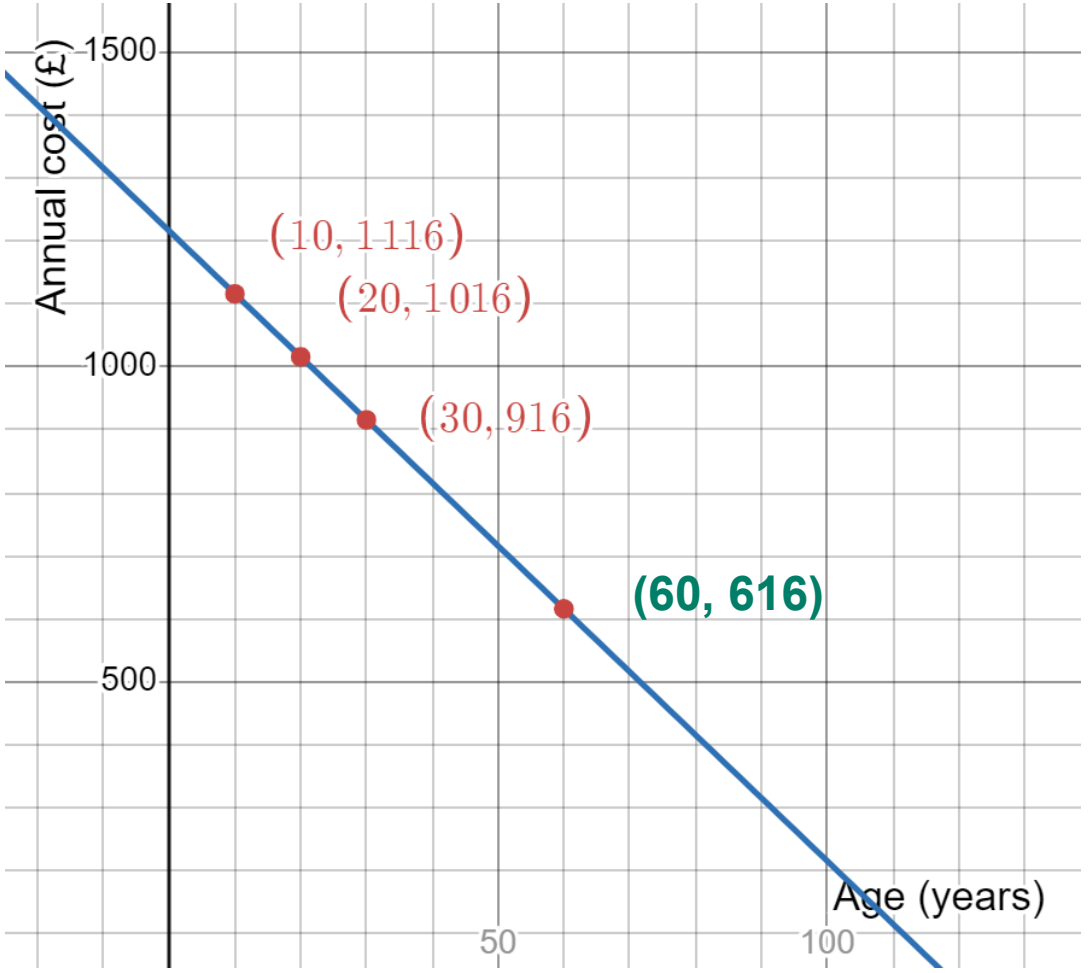
What do you notice?



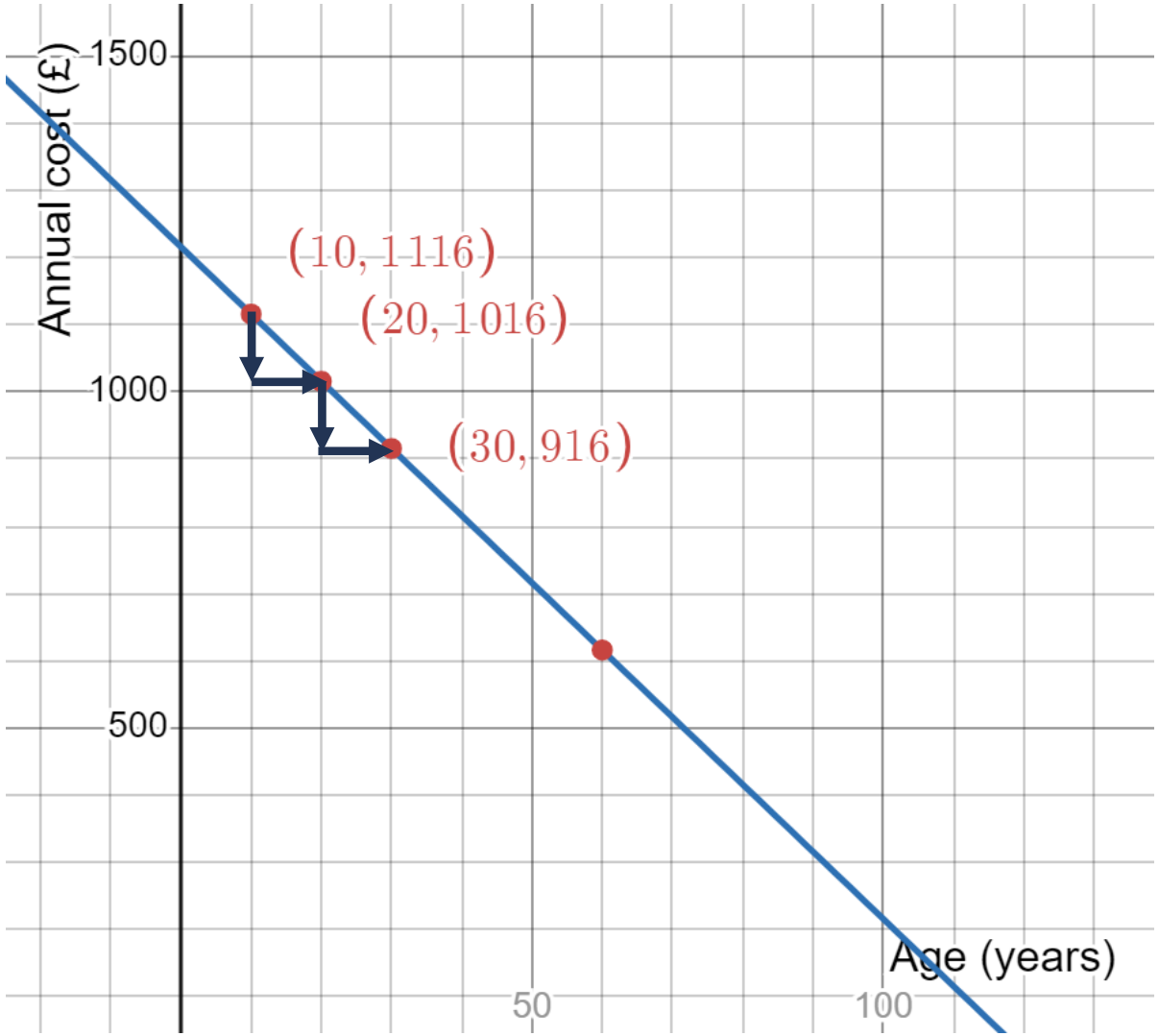
Activity 1: Car insurance

Another point has been added. What are its coordinates?

Write down the coordinates of another point you know is on this line. Try to choose one no one else does.



Activity 1: Car insurance



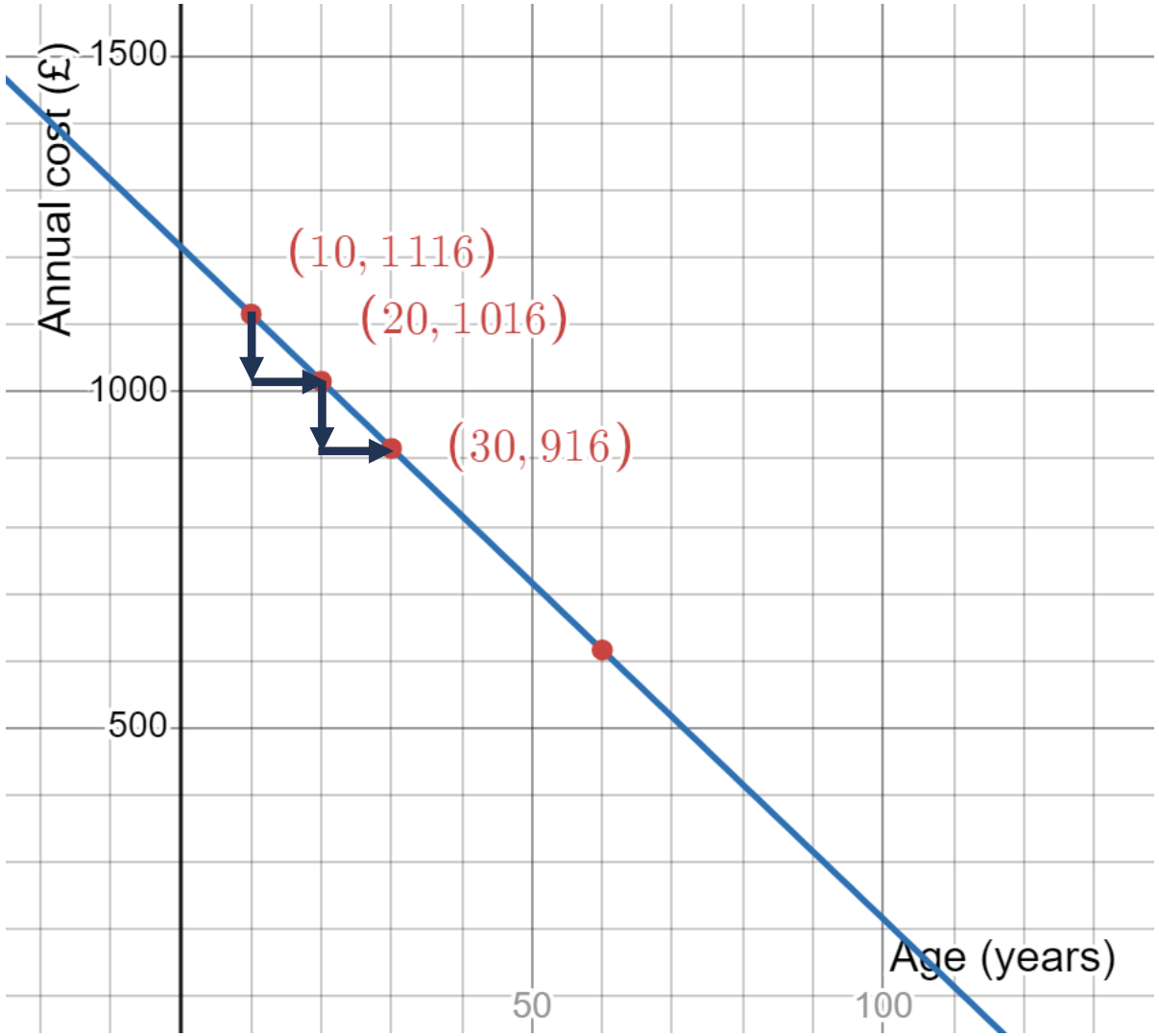
As the *x*-coordinate increases by 10, the *y*-coordinate goes down by _____

As the *x*-coordinate increases by ___, the *y*-coordinate goes down by 10

The **gradient** of this line is _____

This means that, in general, for every year older you are, your annual cost goes **down** by £ _____

Activity 1: Car insurance



As the *x*-coordinate increases by 10, the *y*-coordinate goes down by 100

As the *x*-coordinate increases by 1, the *y*-coordinate goes down by 10

The **gradient** of this line is -10

This means that, in general, for every year older you are, your annual cost goes **down** by £ 10

Activity 1: Car insurance

It is useful to work out the equation of the line of best fit so you can estimate the annual cost for a driver based on their age.

The general equation of a straight line is

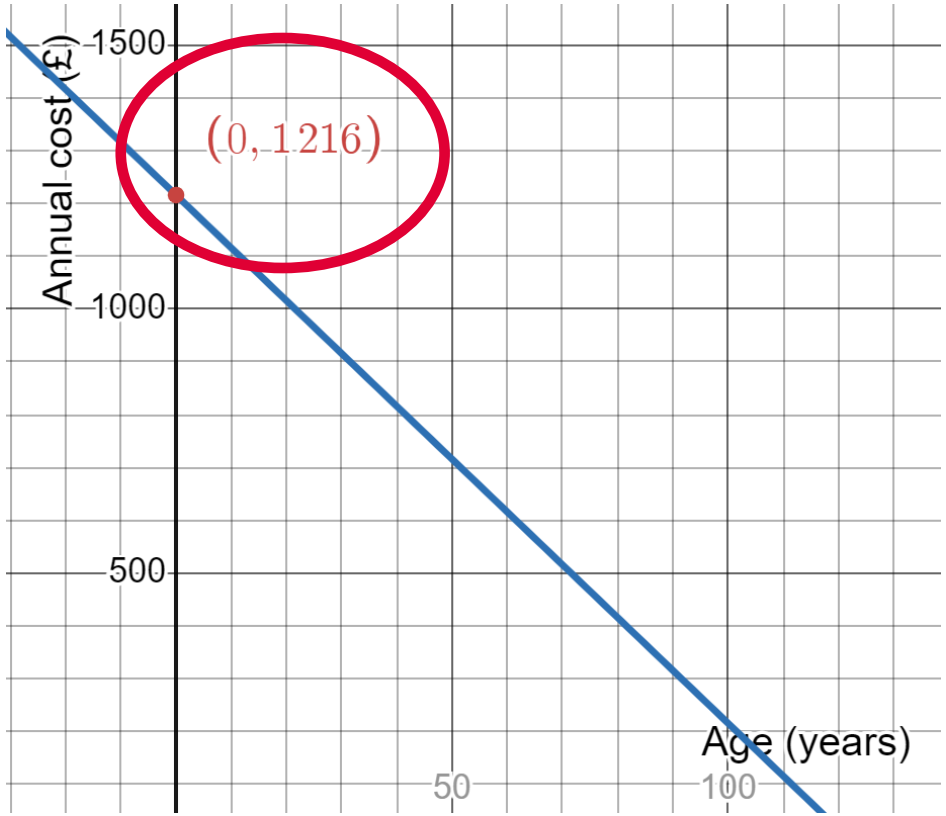
$$y = mx + c$$

You have worked out that the gradient is -10.

$$y = -10x + c$$

The value of *c* is where the line crosses the y-axis.

$$\boldsymbol{y = -10x + 1216}$$



Activity 1: Car insurance

Joy is 33. Use the line of best fit to estimate the cost of her insurance.

The line of best fit is $\boldsymbol{y = -10x + 1216}$ *or* $\boldsymbol{y = 1216 - 10x}$

You could think of this as:

Annual cost (in £) = 1216 – (10 × age (in years))

Joy is 33, so her annual cost will be:

= 1216 – (10 × 33)

= 1216 – 330

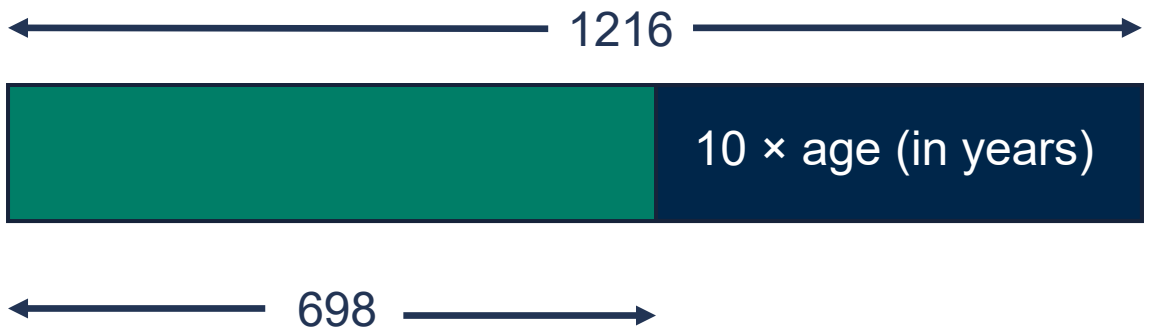
Annual cost = £886

Activity 1: Car insurance

Franek is paying £698 per year. Estimate his age using the line of best fit.
The line of best fit is $y = -10x + 1216$ *or* $y = 1216 - 10x$

You could think of this as:

Annual cost (in £) = 1216 – (10 × age (in years))



1216 – 698 = 518

518 = 10 × age in years

518 ÷ 10 = 51.8

The estimated age of Franek is **52 years old**.

Reflections on the car insurance activity

Focused 15

Find out more: The Focused 15

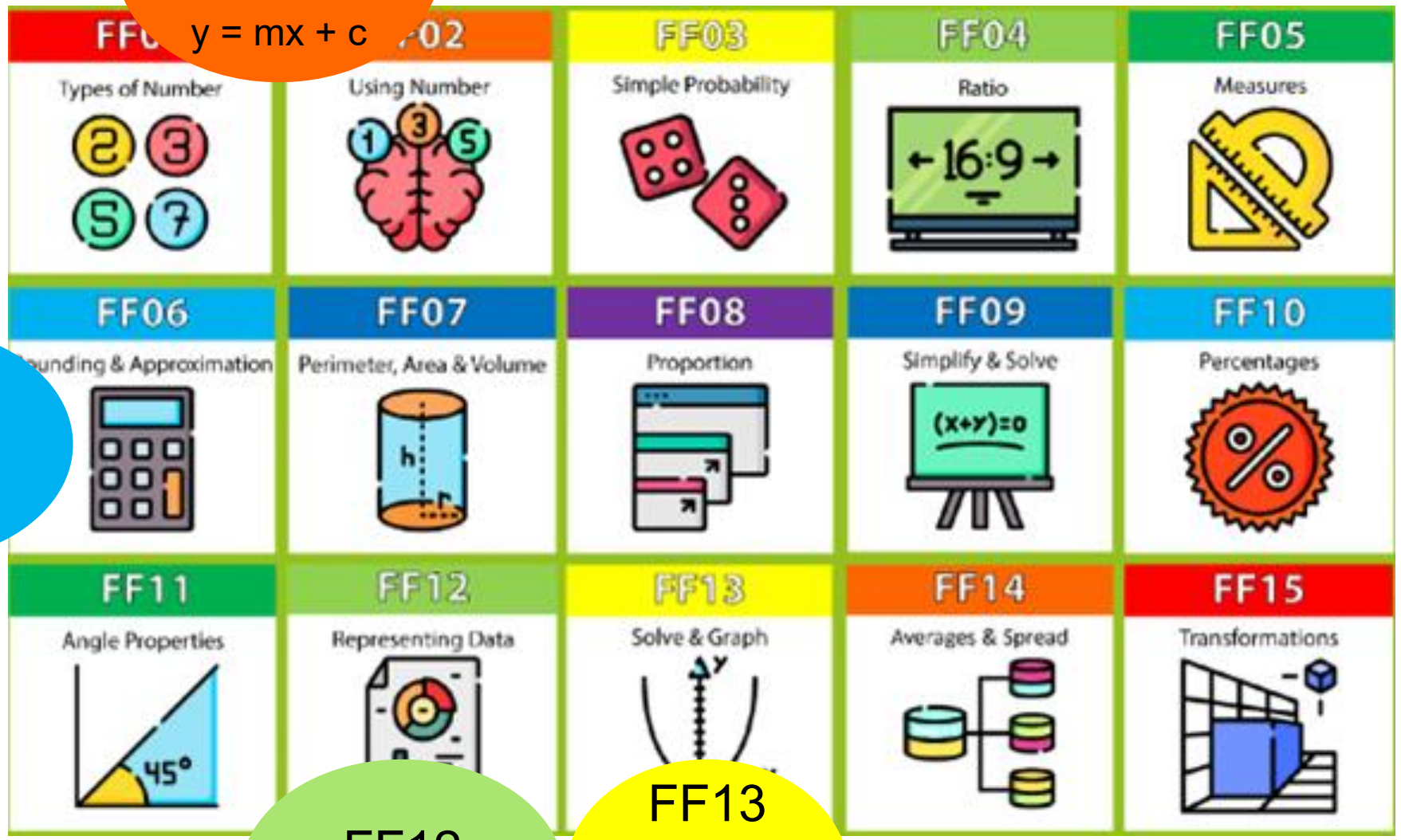
Focused 15

Rationale

Examination data from 2017 and 2018 were analysed in detail on a skill-by-skill basis. This analysis identified the knowledge, skills and behaviours that a Grade 4 student could confidently demonstrate, in comparison with those performing at Grades 3, 2 and 1.

Analysis of the data revealed a consistent pattern, identifying **15 key areas** which, if fully mastered, would secure a **Grade 4** or higher.

FF02
substitute
y = mx + c



FF06
Rounding
Franek's
age

FF12
Correlation

FF13
Car
insurance
vs age

Creating activities

Painter and Decorater

01 April 2026

Ethero - Stoke-on-Trent, Midlands, ST5 6RE

£14.50 to £17.50 per hour

Adapted Frayer Model

How do I make it have a financial focus and feel authentic?

Finance ✓

Local ✓

Current ✗

Painter and Decorater

01 April 2026
Ethero - Stoke-on-Trent, Midlands, ST5 6RE
£14.50 to £17.50 per hour

Recruitment Agent Coordinator

12 March 2026
Keele University - University Of Keele, Keele
£27,319 per year

How am I going to hook students in?

Tell a story about another student/friend/son or make it about one of them.

Ask what their gut says.

Provide more information.

What questions will I ask?

Using your gut, which job pays better?

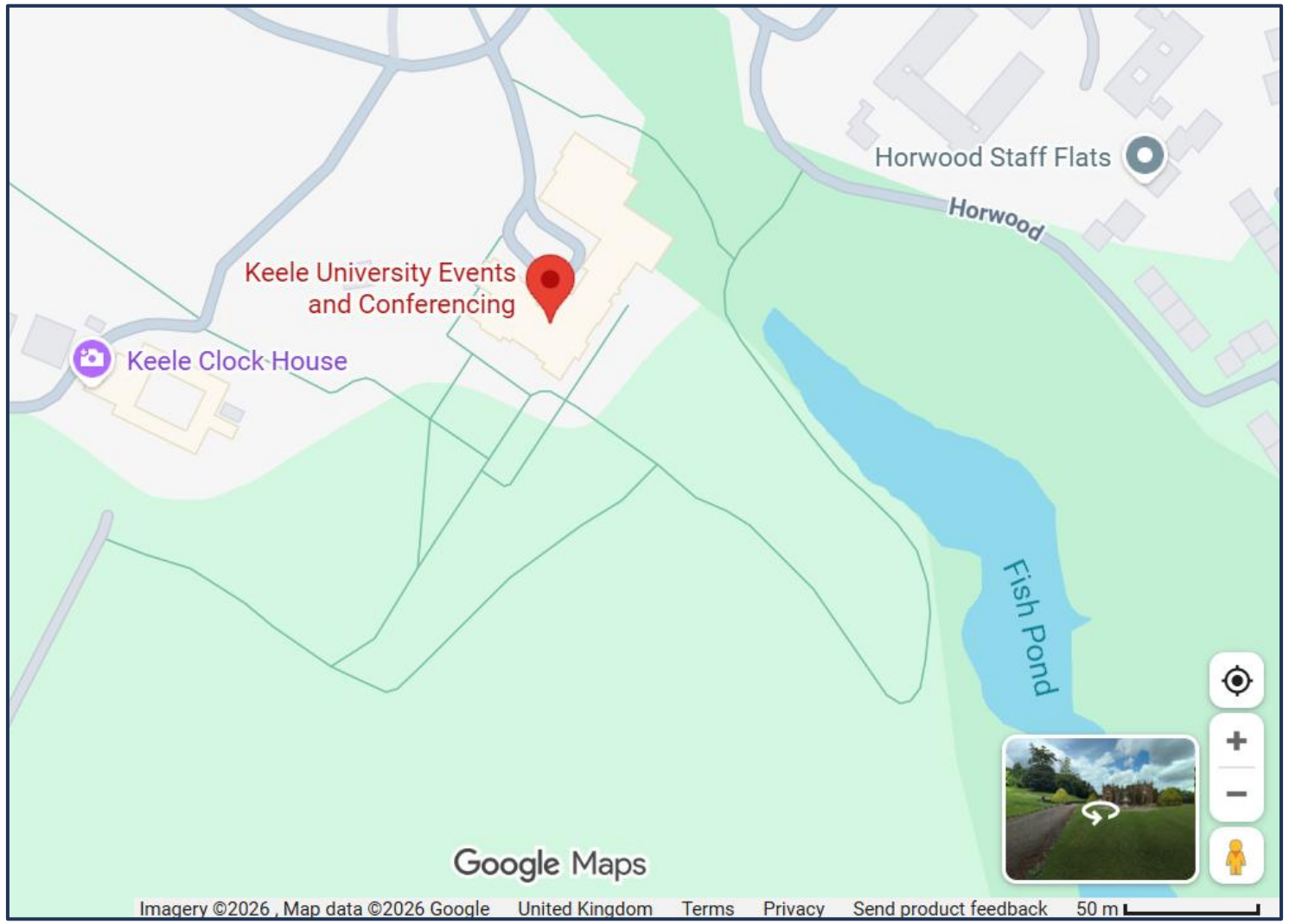
What else do we need to know to work this out?

What else do we need to consider?

What maths skills from Focused 15 are being developed?

Use one calculation to find answer to another.

Estimate answers



Standing events:

Allow 0.5 to 0.75m^2 per person

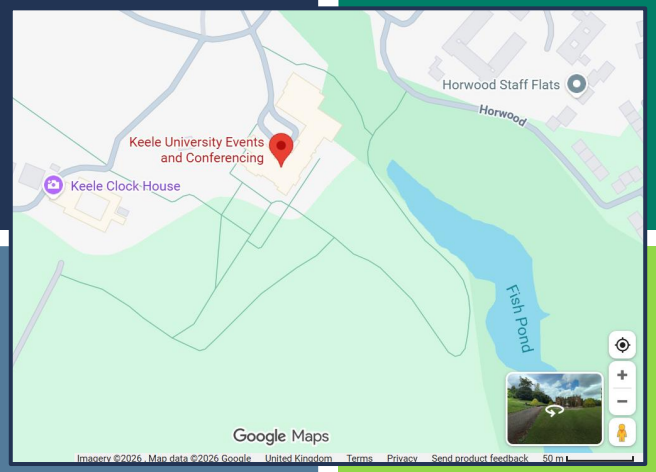
Seated events:

Allow 1.5 to 2m^2 per person

Your turn!

How do I make it have a financial focus and feel authentic?

How am I going to hook students in?



What questions will I ask?

What maths skills from Focused 15 are being developed?

Sharing ideas

MEI®
Because maths matters!

Reflections and resources

RME resources

Core Maths Warm Ups

Mathematical Hooks

Apprentice clips:

- Bangers and maths
- Cost of Sandalwood
- Making pasta
- Bao buns