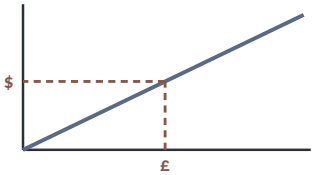
Conversion graphs: fact sheet

Planner week 18 · Learn these facts

Reading across



Up from one axis to the line

Then across to the other

Scales

count what one

small square is worth

Check both axes

e.g. 1 square = £0.50

Off the graph

$345 is off the scale

$65 = £50

345 ÷ 65 × 50 = £265

Use a point you can read

Then scale up

Fixed charge

where the line

crosses the y-axis

Cost when the distance is 0

Rate

change in y ÷ change in x

£90 ÷ 60 miles = £1.50

The gradient: cost per mile

Curved graphs

steep = changing fast

flat = changing slowly

Compare the drops

e.g. cooling

Scale lines

0 10 20 30 miles

0 16 32 48 km

Read straight across

5 miles ≈ 8 km

Show it

Draw	your lines on the graph
Units	on every answer

Key words

- **Conversion graph** changes one unit into another
- **Fixed charge** what you pay before anything else
- **Rate** how much per one unit
- **Estimate** a reading from a graph

Exam tips

- Work out the scale on both axes first.
- Draw lines on the graph to show your reading.
- Off the scale? Use a value you can read, then multiply.
- Straight line through (0, 0): direct proportion.
- Doesn't start at 0? That is a fixed charge.
- Write the units in your answer.

Conversion and real-life graphs: fact sheet

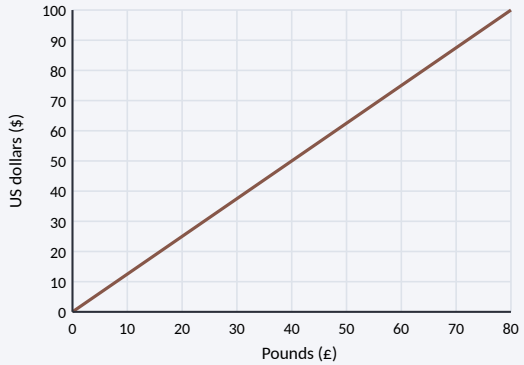
Conversion graphs · Planner week 18 · Learn the method

Worked example

QUESTION

You can use the graph to change between pounds (£) and US dollars ($).

Rosie pays $260 for a phone. How much is this in pounds?



ANSWER

1. $260 is off the graph, so use a value you can read.
2. Read from the graph: $100 = £80
3. $260 = $100 + $100 + $60. $60 = £48 (from the graph)
4. £80 + £80 + £48

£208

Read a value you can see, then build up.

How to do it

1. Find the scale on each axis.
2. Go from the value you know to the line.
3. Go across or down to read the other value.
4. Off the scale: read an easy value and multiply.
5. Fixed charge: where the line meets the axis.

Model answer:

$100 = £80, so $260 ≈ £208

Watch out

- Misreading the scale (1 square is not always 1).
- Reading from the wrong axis.
- Forgetting a fixed charge.