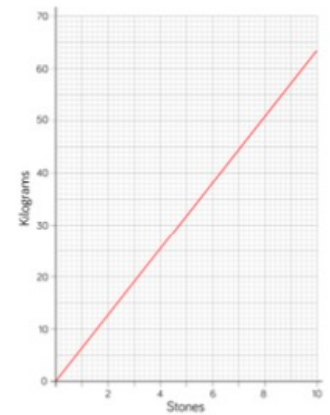


YEAR 11 — USING GRAPHS

By the end of this unit you should be able to:	MathsWatch clip	Video tutorial
• Construct & interpret conversion graphs		Corbett Corbett
• Construct & interpret other real-life straight graphs		Corbett
• Interpret distance/time graphs	143	Corbett
• Construct distance/time graphs		Corbett
• Construct & interpret speed/time graphs	216a	MathsGenie
• Recognise & interpret graphs that illustrate direct & inverse proportion		Corbett
• Find approximate solutions to equations using graphs		Corbett
• Estimate the area under a curve (H)	216a	Corbett



Keywords

Parallel: straight lines that never meet (equal gradients)

Horizontal: a straight line which goes from side to side, parallel to the x-axis

Vertical: a straight line which goes up and down, parallel to the y-axis

Intercept: the point where a line crosses the axis of a graph

Gradient: the steepness (or slope) of a line. A negative gradient means the line slopes downhill

Constant: unchanging. It will be a straight line on a graph, for example, a constant speed on a distance-time graph will be a straight diagonal line

Reciprocal: the reciprocal of a number is 1 divided by that number.

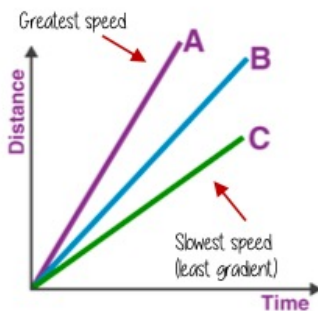
Convert: change between two different units of measurement, such as cm and inches

Direct proportion: two quantities which remain in the same ratio at all times

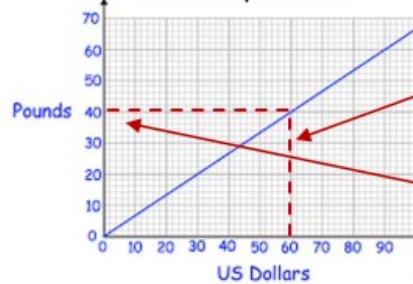
Inverse proportion: a relationship in which one quantity increases as the other decreases

Acceleration: the rate at which velocity changes

Some (but not all) key points:

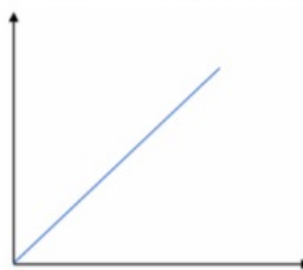
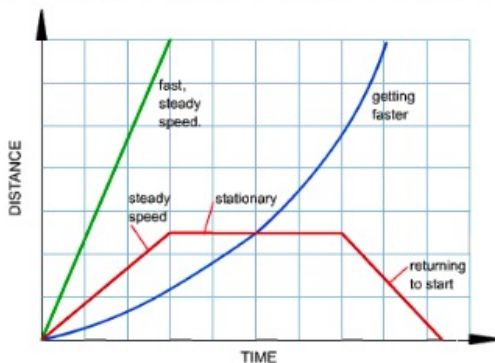


Convert \$60 to £

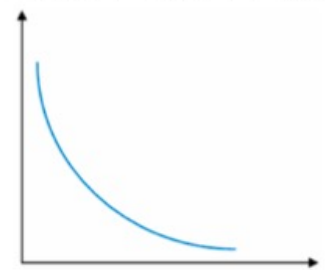


Step 1:
Go up from 60\$ until you hit the diagonal conversion line

Step 2:
Go across until you hit the axis and read off the value: £40



Direct proportion



Inverse proportion