

# Year 8 Mathematics Learning Journey: Unit 4 - Multiplicative Change

Step 8: Interpret maps with scale factors

What does the scale 1 : 25 000 mean on a map?

Step 7: Draw and interpret scale diagrams

Samira draws a picture of a car with a scale of 1:30. The car is 3m long, how long is her scale drawing?

Step 6: Understand scale factors

What range of scale factors would make an image smaller?

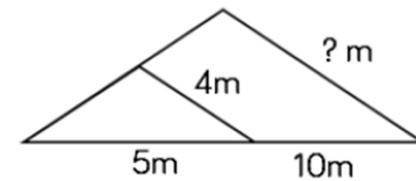
Step 4 (H): Direct proportion graphs

If a car is travelling at a *constant speed*, the distance it travels is directly proportional to the time it has been travelling. Complete the table and draw the graph.

Time (mins)	30	60		114.2
Distance (miles)	18		300	

Step 5: Ratio between similar shapes

Two triangles are similar. Find the missing length.



Step 3: Convert between currencies

Is converting a currency an example of direct proportion?

Step 2: Explore conversion graphs

Do all conversion graphs start at the origin?

Step 1: Direct Proportion

5 scoops of ice cream costs £4.50. How much would it cost for 9 scoops?

