

Procedural variation answers

An object is moving with a velocity that changes proportionally with time. After **5 seconds** its velocity is **105 m/s**.

(a) How fast will it be travelling after **12 seconds**?

Velocity (m/s)	105	210	21	42	252
Time (s)	5	10	1	2	12

(b) How fast will it be travelling after **4 seconds**?

Velocity (m/s)	105	21	42	84
Time (s)	5	1	2	4

(c) How fast will it be travelling after **2 minutes and 13 seconds**?

Velocity (m/s)	105	210	630	2100	63	2793
Time (s)	5	10	30	100	3	133

Naz buys a fridge from a shop for £189.

The cost of delivery is proportional to the distance from the shop.

For **15 miles**, the cost is **£9**.

Naz lives **24 miles** from the shop.

Is the total cost for the fridge and delivery **more** than £200?

You **must** show your working.

Distance (miles)	15	5	25	1	24
Cost (£)	9	3	15	0.6	14.40

Yes the total costs is $£189 + 14.40 = £203.40$