

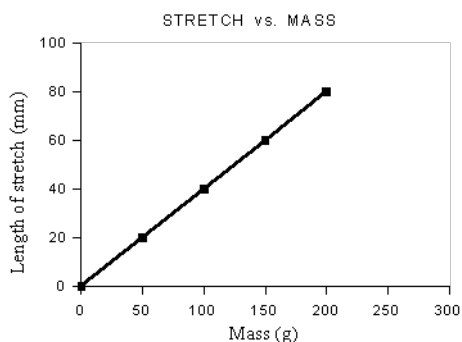
Springs

This task is about identifying patterns in data.

Tracey had been investigating how much a spring stretched when various masses were attached to it. Here are the results of her investigation:

Mass (g)	Length of stretch (mm)
50	20
100	40
150	60
200	80

She graphed her results like this:



a) Use the graph to work out the length of stretch for

i) 60 g mm

ii) 160 g mm

b) What is the mass if the stretch is 45 mm? g

c) There is a simple relationship between mass and stretch. What is the relationship?

stretch = $0.4 \times$ mass

mass = $0.4 \times$ stretch

stretch = $20 +$ mass

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