

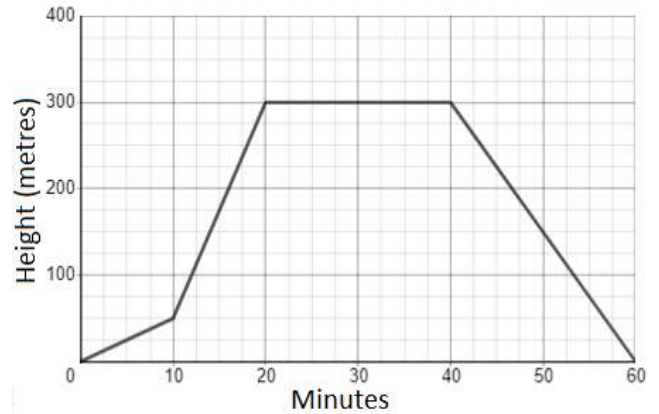
Distance-Time Graphs #3

1 To the right is a graph of the height of a balloon above the ground during a flight.

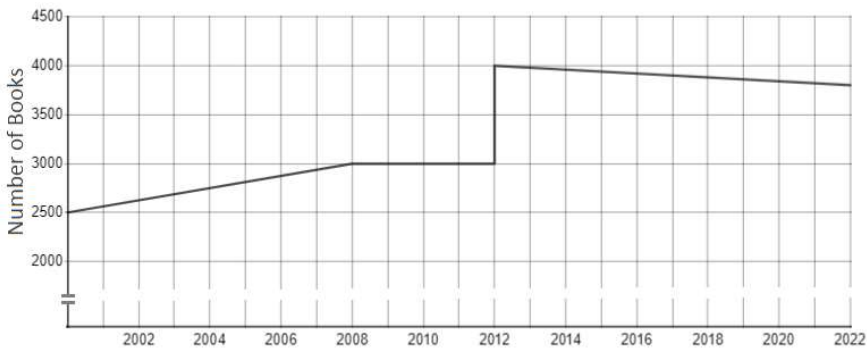
a) How long was the balloon in the air for?

b) After how many minutes did it start descending (going down)?

c) How fast was it rising at the 15th minute?



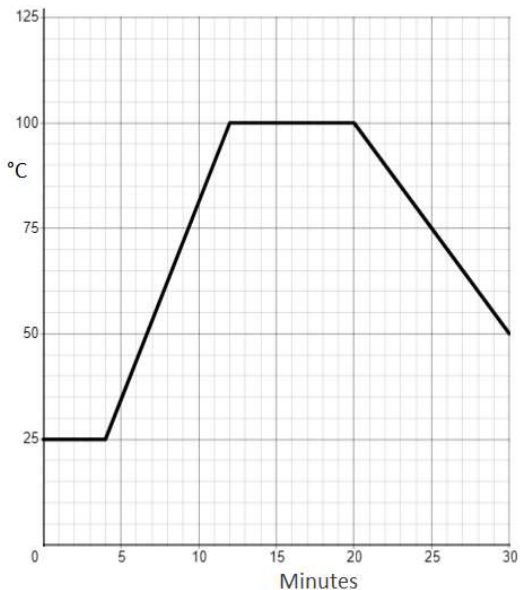
2 Below is a graph of the number of books in Hermione's bookshop.



a) When did Hermione move to a bigger bookshop?

b) What was happening to the number of books in her shop from 2012 to 2020?

c) How many extra books was she adding each year in 2004?



3 To the left is a graph of the temperature of a pan of water on an element on a stove.

a) When was the element turned on?

b) What temperature was the water heated to?

c) How quickly did the water warm up?

d) Did the water cool down as quickly as it had heated up?

MAN²⁰²⁵
VS
MATHS

Distance-Time Graphs #3

1 To the right is a graph of the height of a balloon above the ground during a flight.

a) How long was the balloon in the air for?

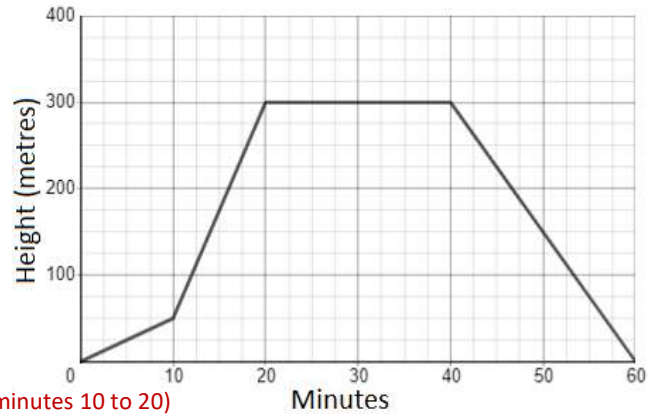
60 minutes (took off at minute 0, landed at 60)

b) After how many minutes did it start descending (going down)?

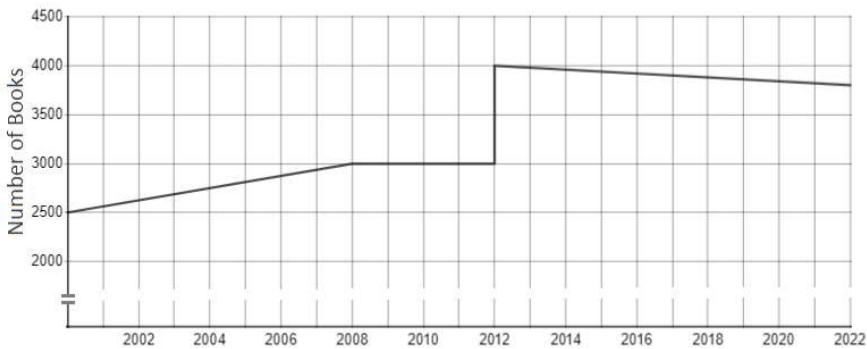
After 40 minutes (starts going down then)

c) How fast was it rising at the 15th minute?

25 metres per minute (250 m in 10 minutes, from minutes 10 to 20)



2 Below is a graph of the number of books in Hermione's bookshop.



a) When did Hermione move to a bigger bookshop?

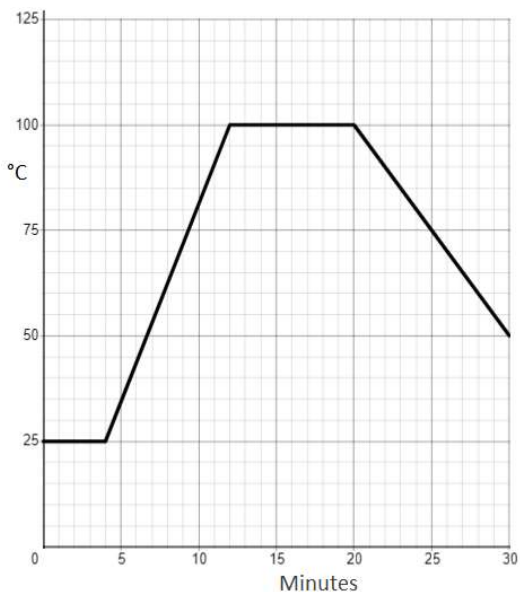
at the start of 2012 (there is a large jump in the number of books then)

b) What was happening to the number of books in her shop from 2012 to 2020?

The number of books was slowly decreasing (the graph has a gentle negative gradient)

c) How many extra books was she adding each year in 2004?

62.5 books per year (in 8 years, from 2000 to 2008, it went up by 500 books, from 2500 to 3000, so $500 \div 8$)



3 To the left is a graph of the temperature of a pan of water on an element on a stove.

a) When was the element turned on?

At minute 4 (the line stops being flat at 25°C)

b) What temperature was the water heated to?

100°C (the line stops rising)

c) How quickly did the water warm up?

9.375°/minute (a 75° rise in 8 minutes, then rise over run)

d) Did the water cool down as quickly as it had heated up?

No, the gradient is less steep ()

MAN²⁰²⁵
vs
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