28 Izzy runs an 80-metre race in 14 seconds.
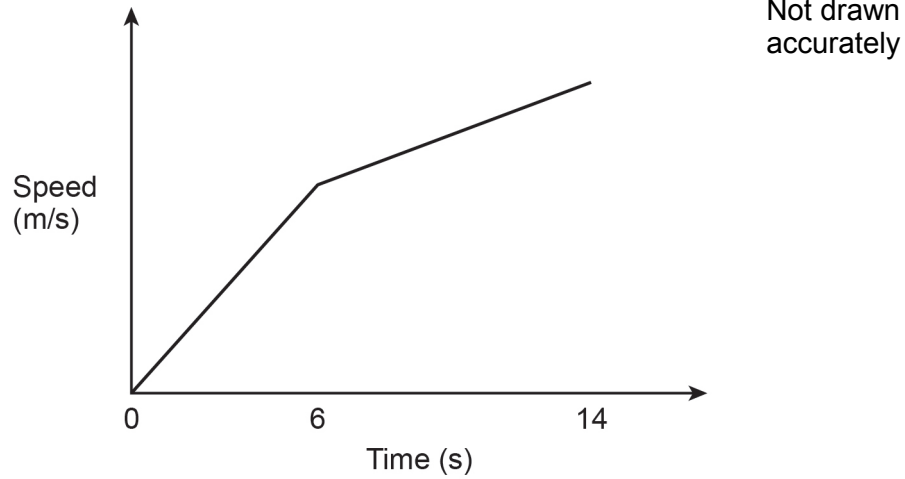
During the first 6 seconds her speed increases at a constant rate.

During the last 8 seconds her speed increases at a different constant rate.

Her speed at 14 seconds is 2 m/s more than her speed at 6 seconds.

Here is a sketch of her speed-time graph.

Not drawn accurately

Speed (m/s)

0   6   14

Time (s)

28 (a) Work out her acceleration during the last 8 seconds.

State the units of your answer.

[2 marks]

Answer _____

28 (b) When Izzy finishes the 80-metre race, her speed is v m/s

Work out the value of v.

[4 marks]

Answer _____

END OF QUESTIONS

6