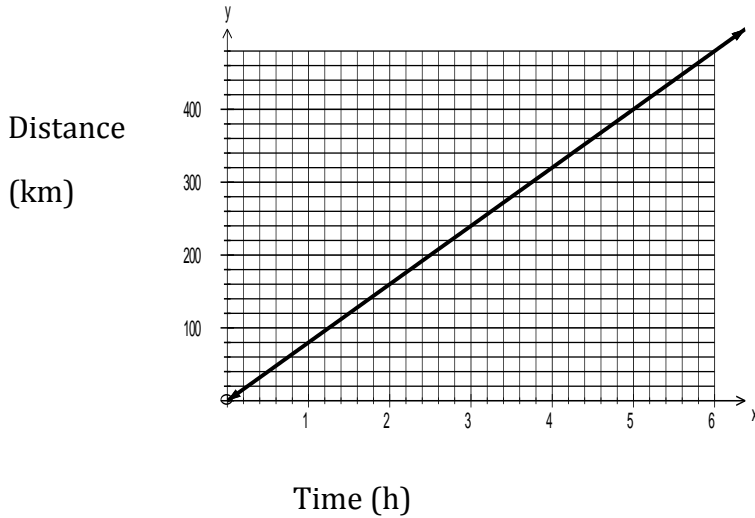


Section 4.5 Using Graphs to Estimate Values

Interpolation: to estimate a value that lies between 2 data points on a graph

Bobbie's Family Trip



How long did it take Bobbie's family to travel 320km?

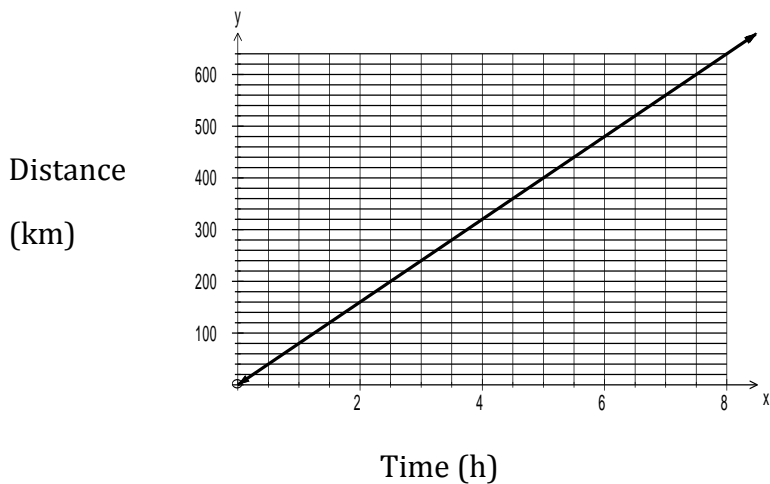
- Locate the point on the y axis that represents 320km (How much is each block worth on this graph? _____)
- Draw a horizontal line to the graph
- Then draw a vertical line from the graph to the x-axis
- Read the value where the vertical line meets the x-axis

It took about _____ to travel 320km.

Extrapolation: to estimate a value that lies beyond data points on a graph

How long will it take Bobbie's family to travel 640km?

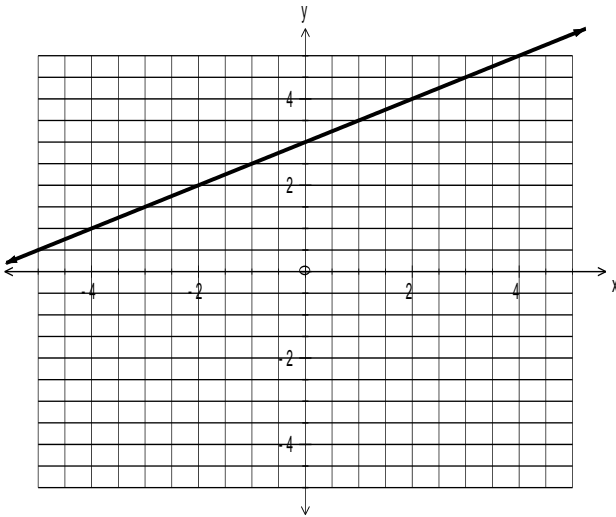
- Since the relation appears to be linear, we can extend the graph



- Locate the point on the y-axis that represents 640km
- Draw a horizontal line to the graph
- Then draw a vertical line from the graph to the x-axis
- Read the value where the vertical line meets the x-axis.

It will take about _____ to travel 640km.

Determining Values from a Graph



Determine the value of y when $x = -2$.

- Begin at -2 on the x-axis
- Draw a vertical line up to the graph
- Then draw a horizontal line across to the y-axis
- Read the value where the horizontal line meets the y-axis

When $x = -2$, then $y =$ _____

Determine the value of x when $y = 5$

- Begin at 5 on the y-axis
- Draw a horizontal line to the graph
- Then draw a vertical line down to the x-axis
- Read the value where the vertical line meets the x-axis

When $y = 5$, then $x =$ _____

Determine the value of x when $y = 3$.

When $y = 3$, then $x =$ _____

Assign Pages 196 - 197 #4 to 11