Exploring Rates

Understands what a rate is	Writes a rate as a unit rate	Uses a graph to represent a rate, and solve a related problem	Uses a proportion to solve a rate problem
A rate is a comparison of two quantities with different units, e.g., 3 kg for $6, 100 km in 2 h	Divide to write a rate as a unit rate, e.g., 3 kg for $6 is $2/kg, 100 km in 2 h is 50 km/h	For a typing speed of 40 words/min, how long would it take to type 100 words?	For a typing speed of 40 words/min, how long would it take to type 240 words?

Uses a graph to represent a rate:

Time (min)	Words Typed
1	40
2	80
3	120
4	160
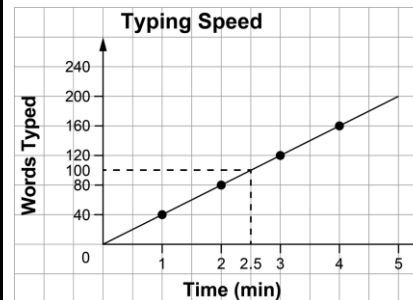
Typing Speed

From the graph, 100 words would be typed in 2.5 min.

Uses a proportion:

Let t minutes represent the time.

$$\frac{t}{240} = \frac{1}{40} \quad \times 6$$

$t = 6$
It would take 6 min.

Observations/Documentation