



Slope as a unit rate

GRADE 8 MATH

Name _____

Date _____

Show your working. Include units on any rate.

WORKED EXAMPLE

Slope = change in y over change in x = the unit rate. Read the scale. Compare rates, not totals.

1. Find the slope through (0,0) and (6,18).

FLUENCY

Show your thinking

Answer

2. Find the slope through (0,0) and (10,4).

FLUENCY

Show your thinking

Answer

3. A line through (0,6) and (3,0). Find the slope and interpret the sign.

APPLICATION

Show your thinking

Answer

4. A y-axis goes up in 4s. A line rises 3 squares over a run of 2. Find the slope.

APPLICATION

Show your thinking

Answer

5. Tap A fills 24 litres in 3 minutes. Tap B's graph shows 15 litres in 2 minutes. Which is faster?

APPLICATION

Show your thinking

Answer

6. $y = 2.5x$. How much y when $x = 8$? What is the unit rate?

APPLICATION

Show your thinking

Answer

7. Zoe says the slope through $(0,0)$ and $(2,7)$ is $\frac{2}{7}$. Correct her and explain the error.

REASONING

Show your thinking

Answer

8. A graph of cost against weight does not pass through the origin. Can it be proportional? Explain.

REASONING

Show your thinking

Answer