

6.5 Graphs and Equations of Proportional Relationships

Chapter 6: Ratios, Rates, and Proportional Reasoning

Name: _____

Date: _____

Class/Period: _____

Problem 6.65 Write the equation when $y/x = 6$.

Problem 6.68 Find x when $y = 9x$ and $y = 117$.

Problem 6.66 Find k for $(4, 30)$.

Problem 6.69 Does $y = 7x$ pass through the origin?

Problem 6.67 Find y when $y = 2.5x$ and $x = 14$.

Problem 6.70 Is $y = 7x + 1$ proportional?

6.5 Graphs and Equations of Proportional Relationships

Chapter 6: Ratios, Rates, and Proportional Reasoning

Problem 6.71 Find the equation for $(3, 12)$, $(5, 20)$, $(9, 36)$.

Problem 6.74 A proportional graph contains $(5, 18)$. Find k .

Problem 6.72 Find the missing value: $(2, 7)$, $(8, 28)$, $(11, y)$.

Problem 6.75 Explain what the point $(0, 0)$ means in a cost graph with no fee.

Problem 6.73 A car travels 55 miles per hour. Write d in terms of t .

Problem 6.76 Give one context for $y = \frac{3}{4}x$.

6.5 Graphs and Equations of Proportional Relationships

Chapter 6: Ratios, Rates, and Proportional Reasoning

Problem 6.77 A machine completes 12 rotations in 8 minutes. Create a table and equation for rotations r after m minutes.

Problem 6.79 A graph contains $(4, 26)$ and $(10, 65)$. Test whether the relationship could be proportional and write the equation if it is.

Problem 6.78 A taxi costs \$3 plus \$2 per mile. Explain why the graph is not proportional even though the cost rises at a constant rate.

Problem 6.80 A proportional graph has constant $k = 1.8$. List all integer-coordinate points with $0 \leq x \leq 10$.