GRADE 7 MATH · CLASSWORK · ADVANCED

Write an Equation to Represent a Proportional Relationship

SCORE / 25

01 Part A · Practice

The constant of proportionality $k = \frac{y}{x}$ is the unit rate; a proportional relationship has the equation $y = kx$.

EXAMPLE

x: 2, 5, 8; y: 7, 17.5, 28. **Write an equation.**

1. $k = 7 \div 2 = 3.5$ (check: $17.5 \div 5 = 3.5$).
2. Equation: $y = 3.5x$.

1 ●○○ y is proportional to x. When $x = 56$, $y = 154$. Write an equation for the relationship.

2 ●○○ For every 8 units of x there are 7 units of y. Write an equation for y in terms of x.

3 ●○○ The table shows a proportional relationship. Find the constant of proportionality k and write an equation.

x	14	20	26	28
y	49	70	91	98

4 ●○○ For every 14 units of x there are 15 units of y. Write an equation for y in terms of x.

© 2026 Math Teacher Prints · 2-4a Classwork · Advanced

Preview - the full worksheet and its answer key are at primeworksheet.com