Lesson 5.2 Practice: Direct Variation

School Launch · Algebra I · Unit 5: Linear Functions · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. y varies directly with x, and $y = 64$ when $x = 8$. Find the constant of variation k and write the equation.

EASY

2. y varies directly with x, and $y = 2$ when $x = 4$. Find the constant of variation k and write the equation.

EASY

3. y varies directly with x, and $y = 18$ when $x = 6$. Find the constant of variation k and write the equation.

EASY

4. The cost of fabric varies directly with its length. Josiah paid $15 for 6 yards. How much would 4 yards cost?

MEDIUM

5. The cost of fabric varies directly with its length. Lydia paid $30 for 12 yards. How much would 17 yards cost?

MEDIUM

6. The cost of fabric varies directly with its length. Ruth paid $33 for 6 yards. How much would 3 yards cost?

MEDIUM

7. The cost of fabric varies directly with its length. Peter paid $20 for 8 yards. How much would 20 yards cost?

MEDIUM

8. The cost of fabric varies directly with its length. Ruth paid $42 for 6 yards. How much would 27 yards cost?

HARD

9. The cost of fabric varies directly with its length. Miriam paid $16 for 2 yards. How much would 16 yards cost? HARD

10. The cost of fabric varies directly with its length. Daniel paid $32 for 8 yards. How much would 25 yards cost? HARD