

1. $y = 4x$. Find y when $x = 6$.

$$4(6)$$

Answer: 24

2. Table: $x = 1, 2, 3$ with $y = 5, 10, 15$. Find k .

$$k = y/x = 5/1$$

Answer: $k = 5$

3. Is $y = 3x + 2$ proportional?

Proportional needs $y = kx$ with no added constant

Answer: No - the +2 breaks it

4. 3 pounds of apples cost \$7.50. Cost per pound?

$$7.50 / 3$$

Answer: \$2.50 per lb

5. $y = kx$ passes through (4, 10). Find k .

$$k = 10/4$$

Answer: $k = 2.5$

6. If 5 tickets cost \$60, what do 8 cost?

$$\text{Per ticket: } 60/5 = 12$$

$$8 \times 12$$

Answer: \$96

7. Table: $x = 2, 4, 6$ with $y = 3, 6, 9$. Write the equation.

$$k = 3/2$$

Answer: $y = 1.5x$

8. A recipe uses 2 cups flour per 3 dozen cookies. Flour for 9 dozen?

$$9 \text{ dozen} = 3 \text{ batches}$$

$$2 \times 3$$

Answer: 6 cups

9. Which is proportional: (A) $y = x/5$ (B) $y = 5/x$ (C) $y = x + 5$? Explain. ★ challenge

(A) is $y = (1/5)x$ - form $y = kx$

(B) divides BY x ; (C) adds

Answer: (A) only

10. y is proportional to x , and $y = 18$ when $x = 4$. Find y when $x = 10$. ★ challenge

$$k = 18/4 = 4.5$$

$$y = 4.5(10)$$

Answer: 45