

HW #8-1

Example 1 Tell whether $\frac{2}{8}$ and $\frac{3}{12}$ form a proportion.

Compare the ratios in simplest form.

$$\frac{2}{8} = \frac{2 \div 2}{8 \div 2} = \frac{1}{4}$$

$$\frac{3}{12} = \frac{3 \div 3}{12 \div 3} = \frac{1}{4}$$

The ratios are equivalent.

► So, $\frac{2}{8}$ and $\frac{3}{12}$ form a proportion.

Tell whether the ratios form a proportion.

1. $\frac{5}{3}, \frac{35}{21}$

2. $\frac{9}{24}, \frac{24}{64}$

3. $\frac{8}{56}, \frac{6}{28}$

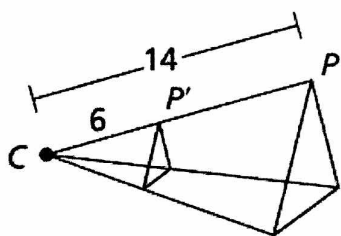
4. $\frac{18}{4}, \frac{27}{9}$

5. $\frac{15}{21}, \frac{55}{77}$

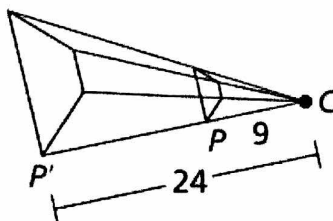
6. $\frac{26}{8}, \frac{39}{12}$

Find the scale factor of the dilation.

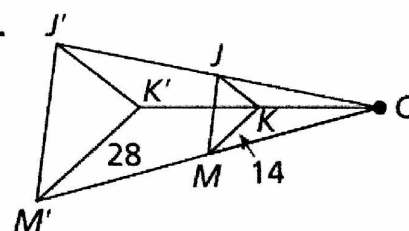
7.



8.



9.



Example to use for the back side "Did the Farmer..."

$$\textcircled{1} \quad 5x + 2x = 56 \rightarrow 7x = 56 \rightarrow x = 8 \rightarrow \begin{matrix} 5(8) = 40 \\ 2(8) = 16 \end{matrix}$$

ED

Next to the white line

- | | |
|----|------------------|
| TH | 48, 102 |
| NO | 24, 18, 6 |
| EM | 45, 20 |
| NE | 350, 650 |
| ED | 40, 16 |
| LO | 6, 6, 9, 18, 21 |
| AZ | 32, 48 |
| TH | 14, 21, 35 |
| HE | 45, 105 |
| IF | 26, 18, 4 |
| GR | 96, 36, 48 |
| RU | 98, 32, 50 |
| JU | 8, 8, 12, 24, 28 |
| ST | 375, 625 |
| EW | 30, 45 |

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7	7	2	2	8	8	4	4	6	6	9	9	1 E	1 D	5	5	3	3
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BOOKS NEVER WRITTEN

Yours Forever by

$$\frac{84}{5} \quad \frac{20}{3} \quad -\frac{3}{2} \quad -\frac{3}{2} \quad \frac{20}{3} \quad \frac{32}{3} \quad -12 \quad \frac{11}{4} \quad \frac{12}{7} \quad \frac{84}{5} \quad \frac{20}{3} \quad 15 \quad \frac{32}{3}$$

The Incompetent Bullfighter by

$$\frac{5}{8} \quad \frac{33}{16} \quad -\frac{43}{4} \quad \frac{11}{4} \quad \frac{33}{16} \quad -12 \quad \frac{38}{7} \quad -\frac{3}{2} \quad 21 \quad \frac{11}{4} \quad \frac{11}{4} \quad \frac{8}{9}$$

ABOVE ARE THE TITLES OF TWO "BOOKS NEVER WRITTEN." TO DECODE THE NAMES OF THEIR AUTHORS, FOLLOW THESE DIRECTIONS:

Solve each equation below and find the solution in the code. Each time the solution appears, write the letter of that exercise above it.

Ⓢ $\frac{x}{6} = \frac{7}{2}$

Ⓔ $\frac{a}{8} = \frac{4}{3}$

Ⓨ $\frac{2}{9} = \frac{t}{4}$

ⓐ $\frac{8}{11} = \frac{3}{2y}$

Ⓖ $\frac{1}{6x} = \frac{4}{15}$

Ⓛ $\frac{k+5}{7} = \frac{5}{3}$

Ⓑ $\frac{x-4}{2} = \frac{x+1}{9}$

Ⓝ $\frac{7}{d+5} = \frac{10}{d+2}$

Ⓐ $\frac{x}{4} = \frac{2x+3}{15}$

Ⓜ $\frac{21}{y-8} = 3$

Ⓡ $\frac{17-4x}{12} = 5$

Ⓣ $\frac{11u}{6} = u + 14$

Ⓓ $\frac{2n+3}{4} = \frac{5n-1}{6}$

Ⓛ $\frac{15}{8x-3} = \frac{1}{2+2x}$