

## Practice

1. Create an equivalent ratio for each given ratio below by multiplying the top and bottom by a scale factor ( $\frac{3}{3}$ ,  $\frac{4}{4}$ , etc.).
2. Check for equivalence by simplifying both ratios.
3. Write the proportion, showing that the 2 ratios are equivalent and, therefore, proportional.
4. Explain to a partner the steps you used to determine that the ratios are equivalent. Be sure to use the correct mathematical language in your explanation.

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{6 \text{ oranges}}{7 \text{ bananas}}$	$\frac{x}{x}$	$\frac{\text{oranges}}{\text{bananas}}$
Check for equivalence: $\frac{6}{7} = \underline{\quad}$ $\underline{\quad} = \underline{\quad}$		
Write the proportion: $\underline{\quad} = \underline{\quad}$		

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{4 \text{ pencils}}{10 \text{ pens}}$	$\frac{x}{x}$	$\frac{\text{pencils}}{\text{pens}}$
Check for equivalence: $\frac{4}{10} = \underline{\quad}$ $\underline{\quad} = \underline{\quad}$		
Write the proportion: $\underline{\quad} = \underline{\quad}$		

Name: \_\_\_\_\_

## Independent Practice

1. Create an equivalent ratio for each given ratio below by multiplying the top and bottom by a scale factor ( $\frac{3}{3}$ ,  $\frac{4}{4}$ , etc.).
2. Check for equivalence by simplifying both ratios.
3. Write the proportion, showing that the 2 ratios are equivalent and, therefore, proportional.

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{8 \text{ cats}}{5 \text{ dogs}}$	$\frac{x}{x}$	$\frac{\text{cats}}{\text{dogs}}$

Check for equivalence:

$$\frac{8}{5} = \text{---} \quad \text{---} = \text{---}$$

Write the proportion:

$$\text{---} = \text{---}$$

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{3 \text{ pepperoni pizzas}}{9 \text{ cheese pizzas}}$	$\frac{x}{x}$	$\frac{\text{pepperoni pizzas}}{\text{cheese pizzas}}$

Check for equivalence:

$$\frac{3}{9} = \text{---} \quad \text{---} = \text{---}$$

Write the proportion:

$$\text{---} = \text{---}$$



## Answer Key: Practice

Answers will vary.

1. Create an equivalent ratio for each given ratio below by multiplying the top and bottom by a scale factor ( $\frac{3}{3}$ ,  $\frac{4}{4}$ , etc.).
2. Check for equivalence by simplifying both ratios.
3. Write the proportion, showing that the 2 ratios are equivalent and, therefore, proportional.
4. Explain to a partner the steps you used to determine that the ratios are equivalent. Be sure to use the correct mathematical language in your explanation.

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{6 \text{ oranges}}{7 \text{ bananas}}$	$\frac{\times 3}{\times 3}$	$\frac{18 \text{ oranges}}{21 \text{ bananas}}$
Check for equivalence:		
$\frac{6}{7} = \frac{6}{7} \quad \frac{18}{21} = \frac{6}{7}$		
Write the proportion:		
$\frac{6}{7} = \frac{18}{21}$		

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{4 \text{ pencils}}{10 \text{ pens}}$	$\frac{\times 4}{\times 4}$	$\frac{16 \text{ pencils}}{40 \text{ pens}}$
Check for equivalence:		
$\frac{4}{10} = \frac{2}{5} \quad \frac{16}{40} = \frac{2}{5}$		
Write the proportion:		
$\frac{4}{10} = \frac{16}{40}$		



## Answer Key: Independent Practice

Answers will vary.

1. Create an equivalent ratio for each given ratio below by multiplying the top and bottom by a scale factor ( $\frac{3}{3}$ ,  $\frac{4}{4}$ , etc.).
2. Check for equivalence by simplifying both ratios.
3. Write the proportion, showing that the 2 ratios are equivalent and, therefore, proportional.

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{8 \text{ cats}}{5 \text{ dogs}}$	$\frac{\times 6}{\times 6}$	$\frac{48 \text{ cats}}{30 \text{ dogs}}$
Check for equivalence: $\frac{8}{5} = \frac{8}{5}$ $\frac{48}{30} = \frac{8}{5}$		
Write the proportion: $\frac{8}{5} = \frac{48}{30}$		

Given Ratio	Scale Factor (multiply by the same number)	Equivalent Ratio
$\frac{3 \text{ pepperoni pizzas}}{9 \text{ cheese pizzas}}$	$\frac{\times 5}{\times 5}$	$\frac{15 \text{ pepperoni pizzas}}{45 \text{ cheese pizzas}}$
Check for equivalence: $\frac{3}{9} = \frac{1}{3}$ $\frac{15}{45} = \frac{1}{3}$		
Write the proportion: $\frac{3}{9} = \frac{15}{45}$		