

Cumulative Review

1. A baby giraffe was born 6 feet tall. Every year, the giraffe will grow 1 foot.

Year x	Process		Giraffe height (in feet) y
	Add	Multiply	
1			
2			
3			
x			

What is the general rule for this scenario? $y =$ _____

Is the scenario additive or multiplicative? _____

The average height for a giraffe is 16 feet. How many years will the baby giraffe grow to reach this height? _____

Cumulative Review (cont.)

2. Jared is going to a picnic. He figures each person will eat 2 deviled eggs.

People x	Process	Eggs y
1		
2		
3		
x		

What is the general rule for this scenario? $y =$ _____

Is the scenario additive or multiplicative? _____

Jared brings 22 deviled eggs. How many people does he expect to be at the picnic? _____

3. Determine whether the 2 ratios below are proportional by using simplification.

If they are proportional, write the ratios as a proportion. If they are not proportional, write "not proportional."

$$\frac{6}{8} \text{ and } \frac{18}{24}$$

Practice

Determine the scale factor, and then find the missing value. Stop after every 2 problems and check with a partner. Discuss your reasoning.

1. $\frac{3}{12} = \frac{6}{x}$

2. $\frac{x}{4} = \frac{15}{20}$

 **STOP**: Check with a partner and discuss reasoning.

3. $\frac{4}{5} = \frac{x}{25}$

4. $\frac{4}{x} = \frac{28}{42}$

 **STOP**: Check with a partner and discuss reasoning.

5. $\frac{2}{4} = \frac{20}{x}$

6. $\frac{x}{7} = \frac{15}{21}$

 **STOP**: Check with a partner and discuss reasoning.

Name: _____

Independent Practice

Determine the scale factor, and then find the missing value.

1. $\frac{1}{4} = \frac{2}{x}$

2. $\frac{x}{5} = \frac{2}{10}$

3. $\frac{8}{9} = \frac{x}{36}$

4. $\frac{4}{x} = \frac{24}{30}$

5. $\frac{3}{6} = \frac{12}{x}$

6. $\frac{x}{6} = \frac{35}{42}$



Answer Key: Cumulative Review

1. A baby giraffe was born 6 feet tall. Every year, the giraffe will grow 1 foot.

Year x	Process		Giraffe height (in feet) y
	Add	Multiply	
1	$1 + 6$	$7(1)$	7
2	$2 + 6$	$4(2)$	8
3	$3 + 6$		9
x	$x + 6$		y

What is the general rule for this scenario? $y = \underline{x + 6}$

Is the scenario additive or multiplicative? additive

The average height for a giraffe is 16 feet. How many years will the baby giraffe grow to reach this height? 10 years



Answer Key: Cumulative Review (cont.)

2. Jared is going to a picnic. He figures each person will eat 2 deviled eggs.

People x	Process	Eggs y
1	$2(1)$	2
2	$2(2)$	4
3	$2(3)$	6
x	$2(x)$	$2x$

What is the general rule for this scenario? $y = \underline{2x}$

Is the scenario additive or multiplicative? multiplicative

Jared brings 22 deviled eggs. How many people does he expect to be at the picnic? 11 people

3. Determine whether the 2 ratios below are proportional by using simplification.

If they are proportional, write the ratios as a proportion. If they are not proportional, write "not proportional."

$\frac{6}{8}$ and $\frac{18}{24}$

$\frac{6}{8} = \frac{3}{4}$

$\frac{18}{24} = \frac{3}{4}$

$\frac{6}{8} = \frac{18}{24}$



Answer Key: Practice

Determine the scale factor, and then find the missing value. Stop after every 2 problems and check with a partner. Discuss your reasoning.

$$1. \frac{3}{12} = \frac{6}{x}$$

$$\frac{3 \times \boxed{2}}{12 \times \boxed{2}} = \frac{6}{x}$$

$$12 \times 2 = x$$

$$24 = x$$

$$\frac{3}{12} = \frac{6}{\boxed{24}}$$

$$2. \frac{x}{4} = \frac{15}{20}$$

$$\frac{x \times \boxed{5}}{4 \times \boxed{5}} = \frac{15}{20}$$

$$x \times 5 = 15$$

$$\boxed{3} \times 5 = 15$$

$$x = 3$$

$$\frac{\boxed{3}}{4} = \frac{15}{20}$$

STOP: Check with a partner and discuss reasoning.

$$3. \frac{4}{5} = \frac{x}{25}$$

$$\frac{4 \times \boxed{5}}{5 \times \boxed{5}} = \frac{x}{25}$$

$$4 \times 5 = x$$

$$20 = x$$

$$\frac{4}{5} = \frac{\boxed{20}}{25}$$

$$4. \frac{4}{x} = \frac{28}{42}$$

$$\frac{4 \times \boxed{7}}{x \times \boxed{7}} = \frac{28}{42}$$

$$x \times 7 = 42$$

$$\boxed{6} \times 7 = 42$$

$$x = 6$$

$$\frac{4}{6} = \frac{28}{42}$$

STOP: Check with a partner and discuss reasoning.

$$5. \frac{2}{4} = \frac{20}{x}$$

$$\frac{2 \times \boxed{10}}{4 \times \boxed{10}} = \frac{20}{x}$$

$$4 \times 10 = x$$

$$40 = x$$

$$\frac{2}{4} = \frac{20}{\boxed{40}}$$

$$6. \frac{x}{7} = \frac{15}{21}$$

$$\frac{x \times \boxed{3}}{7 \times \boxed{3}} = \frac{15}{21}$$

$$x \times 3 = 15$$

$$\boxed{5} \times 3 = 15$$

$$x = 5$$

$$\frac{\boxed{5}}{7} = \frac{15}{21}$$

STOP: Check with a partner and discuss reasoning.



Answer Key: Independent Practice

Determine the scale factor, and then find the missing value.

$$1. \frac{1}{4} = \frac{2}{x}$$

$$\frac{1 \times \boxed{2}}{4 \times \boxed{2}} = \frac{2}{x}$$

$$4 \times 2 = x$$

$$8 = x$$

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

$$2. \frac{x}{5} = \frac{2}{10}$$

$$\frac{x \times \boxed{2}}{5 \times \boxed{2}} = \frac{2}{10}$$

$$x \times 2 = 2$$

$$\boxed{1} \times 2 = 2$$

$$x = 1$$

$$\frac{\boxed{1}}{5} = \frac{2}{10}$$

$$3. \frac{8}{9} = \frac{x}{36}$$

$$\frac{8 \times \boxed{4}}{9 \times \boxed{4}} = \frac{x}{36}$$

$$8 \times 4 = x$$

$$32 = x$$

$$\frac{8}{9} = \frac{\boxed{32}}{36}$$

$$4. \frac{4}{x} = \frac{24}{30}$$

$$\frac{4 \times \boxed{6}}{x \times \boxed{6}} = \frac{24}{30}$$

$$x \times 6 = 30$$

$$\boxed{5} \times 6 = 30$$

$$x = 5$$

$$\frac{4}{\boxed{5}} = \frac{24}{30}$$

$$5. \frac{3}{6} = \frac{12}{x}$$

$$\frac{3 \times \boxed{4}}{6 \times \boxed{4}} = \frac{12}{x}$$

$$6 \times 4 = x$$

$$24 = x$$

$$\frac{3}{6} = \frac{12}{\boxed{24}}$$

$$6. \frac{x}{6} = \frac{35}{42}$$

$$\frac{x \times \boxed{7}}{6 \times \boxed{7}} = \frac{35}{42}$$

$$x \times 7 = 35$$

$$\boxed{5} \times 7 = 35$$

$$x = 5$$

$$\frac{\boxed{5}}{6} = \frac{35}{42}$$