

Cumulative Review

1. A store advertised 8 mangoes for \$4. How many mangoes can Marge buy for \$7?

Units	Ratio 1	Unit rate	Ratio 2
$\frac{\text{Dollars}}{\text{Mangoes}}$	$\frac{4}{8}$	$=$	$= \frac{7}{\boxed{}}$

2. Xavier makes \$9 for every 3 jars of jam he sells. How much will Xavier make if he sells 8 jars of jam?

Units	Ratio 1	Unit rate	Ratio 2
$\frac{\text{Dollars}}{\text{Jars}}$	$\frac{9}{3}$	$=$	$= \frac{\boxed{}}{8}$

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

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

Cumulative Review (cont.)

4. Eva's camera takes 9 pictures per minute in sport mode.

Minutes x	Process	Pictures y
1		
2		
10		
x		

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

If Eva goes on a photo shoot for 30 minutes. What is the maximum number of pictures she can take? _____

Practice 1

Complete the table. At each of the marked places below, stop and check your answers with a partner and discuss reasoning.

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{1}{3}$	$8 \times 3 = 24$	$\frac{3}{8} = \frac{\quad}{24}$	$\frac{9}{24}$	$\frac{1}{3} = \frac{\quad}{24}$	$\frac{8}{24}$	no
$\frac{3}{4}$ and $\frac{9}{12}$						
STOP : Check with a partner and discuss reasoning.						
$\frac{2}{3}$ and $\frac{9}{15}$						
$\frac{6}{9}$ and $\frac{9}{12}$						
STOP : Check with a partner and discuss reasoning.						
$\frac{2}{3}$ and $\frac{8}{12}$						
STOP : Check with a partner and discuss reasoning.						

Practice 2

1. Create 4 pairs of ratios and write them in the Ratios column (make sure at least 2 of them are proportional).
2. Trade with a partner and fill out the table to figure out which of your partner's ratios are proportional. The first row has been completed for you as an example.

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{1}{3}$	$8 \times 3 = 24$	$\frac{3}{8} = \frac{x}{24}$	$\frac{9}{24}$	$\frac{1}{3} = \frac{x}{24}$	$\frac{8}{24}$	no

Name: _____

Independent Practice

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{6}{24}$	$8 \times 3 = 24$	$\frac{3}{8} = \frac{x}{24}$	$\frac{9}{24}$	$\frac{1}{3} = \frac{x}{24}$	$\frac{8}{24}$	no
$\frac{8}{10}$ and $\frac{4}{5}$						
$\frac{6}{10}$ and $\frac{4}{8}$						
$\frac{6}{7}$ and $\frac{5}{12}$						
$\frac{9}{12}$ and $\frac{6}{8}$						



Answer Key: Cumulative Review

1. A store advertised 8 mangoes for \$4. How many mangoes can Marge buy for \$7?

Units	Ratio 1	Unit rate	Ratio 2
Dollars	$4 \div 4$	$\frac{1}{2}$	$\frac{7}{14}$
Mangoes	$8 \div 4$	$\frac{1}{2}$	$\frac{7}{14}$

2. Xavier makes \$9 for every 3 jars of jam he sells. How much will Xavier make if he sells 8 jars of jam?

Units	Ratio 1	Unit rate	Ratio 2
Dollars	$9 \div 3$	$\frac{3}{1}$	$\frac{24}{8}$
Jars	$3 \div 3$	$\frac{3}{1}$	$\frac{24}{8}$

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

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

$$\frac{3 \times 4}{5 \times 4} = \frac{12}{x}$$

$$5 \times 4 = x$$

$$20 = x$$

$$\frac{3}{5} = \frac{12}{20}$$



Answer Key: Cumulative Review (cont.)

4. Eva's camera takes 9 pictures per minute in sport mode.

Minutes x	Process	Pictures y
1	$9(1)$	9
2	$9(2)$	18
10	$9(10)$	90
x	$9(x)$	y

What is the general rule for this scenario? $y = \underline{9x}$

If Eva goes on a photo shoot for 30 minutes. What is the maximum number of pictures she can take? 270 pictures

Answer Key: Practice 1

Complete the table. At each of the marked places below, stop and check your answers with a partner and discuss reasoning.

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{1}{3}$	$8 \times 3 = 24$	$\frac{3}{8} = \frac{x}{24}$	$\frac{9}{24}$	$\frac{1}{3} = \frac{x}{24}$	$\frac{8}{24}$	no
$\frac{3}{4}$ and $\frac{9}{12}$	$4 \times 12 = 48$	$\frac{3}{4} = \frac{x}{48}$	$\frac{36}{48}$	$\frac{9}{12} = \frac{x}{48}$	$\frac{36}{48}$	yes
STOP : Check with a partner and discuss reasoning.						
$\frac{2}{3}$ and $\frac{9}{15}$	$3 \times 15 = 45$	$\frac{2}{3} = \frac{x}{45}$	$\frac{30}{45}$	$\frac{9}{15} = \frac{x}{45}$	$\frac{27}{45}$	no
$\frac{6}{9}$ and $\frac{9}{12}$	$9 \times 12 = 108$	$\frac{6}{9} = \frac{x}{108}$	$\frac{72}{108}$	$\frac{9}{12} = \frac{x}{108}$	$\frac{81}{108}$	no
STOP : Check with a partner and discuss reasoning.						
$\frac{2}{3}$ and $\frac{8}{12}$	$3 \times 12 = 36$	$\frac{2}{3} = \frac{x}{36}$	$\frac{24}{36}$	$\frac{8}{12} = \frac{x}{36}$	$\frac{24}{36}$	yes
STOP : Check with a partner and discuss reasoning.						

Answer Key: Practice 2

1. Create 4 pairs of ratios and write them in the Ratios column (make sure at least 2 of them are proportional).
2. Trade with a partner and fill out the table to figure out which of your partner's ratios are proportional. The first row has been completed for you as an example.

Note: Answers will vary.

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{1}{3}$	$8 \times 3 = 24$	$\frac{3}{8} = \frac{x}{24}$	$\frac{9}{24}$	$\frac{1}{3} = \frac{x}{24}$	$\frac{8}{24}$	no

Answer Key: Independent Practice

Ratios	Common denominator	Ratio 1	Equivalent ratio 1	Ratio 2	Equivalent ratio 2	Are the ratios proportional?
$\frac{3}{8}$ and $\frac{6}{24}$	$8 \times 3 = 24$	$\frac{3}{8} \times \frac{x}{24}$	$\frac{9}{24}$	$\frac{1}{3} \times \frac{x}{24}$	$\frac{8}{24}$	no
$\frac{8}{10}$ and $\frac{4}{5}$	$10 \times 5 = 50$	$\frac{8}{10} \times \frac{x}{50}$	$\frac{40}{50}$	$\frac{4}{5} \times \frac{x}{50}$	$\frac{40}{50}$	yes
$\frac{6}{10}$ and $\frac{4}{8}$	$10 \times 8 = 80$	$\frac{6}{10} \times \frac{x}{80}$	$\frac{48}{80}$	$\frac{4}{8} \times \frac{x}{80}$	$\frac{40}{80}$	no
$\frac{6}{7}$ and $\frac{5}{12}$	$7 \times 12 = 84$	$\frac{6}{7} \times \frac{x}{84}$	$\frac{72}{84}$	$\frac{5}{12} \times \frac{x}{84}$	$\frac{35}{80}$	no
$\frac{9}{12}$ and $\frac{6}{8}$	$12 \times 8 = 96$	$\frac{9}{12} \times \frac{x}{96}$	$\frac{72}{96}$	$\frac{6}{8} \times \frac{x}{96}$	$\frac{72}{96}$	yes