

Monday, November 2nd, 2020
7th period

Ratio Applications

part:part

1) Emma will serve 8 appetizers to every 3 people at her party. If 240 people go, how many appetizers will she serve?

Given

8 apps : 3 peop.
240 people total

Find

? total Appetizers

app.	8	$X = 640$
peop.	3	240

$\times 80$ (from 8 to 640)
 $\times 80$ (from 3 to 240)

$$\begin{array}{r} 80 \\ \times 3 \\ \hline 240 \end{array}$$

$$\begin{array}{r} 80 \\ \times 8 \\ \hline 640 \end{array}$$

Emma will serve 640 appetizers

part:part

2) A set of angles has a ratio of 4:3. The big angle is 120°. What is the small angle?

Given

Big 4 : Small 3
Big = 120°

Find

Small = ?

B	4	120
S	3	$X = 90$

$\times 30$ (from 4 to 120)
 $\times 30$ (from 3 to 90)

$$\begin{array}{r} 30 \\ \times 4 \\ \hline 120 \end{array}$$

$$\begin{array}{r} 30 \\ \times 3 \\ \hline 90 \end{array}$$

Small angle is 90°

part:total

3) Jen and Becca sell boxes of candy. Jen sells 8 boxes to every 3 Becca sells. Combined they sell 385 boxes. How many boxes did Becca sell?

Given

Jen 8 : Becca 3
total = 385 boxes

Find

Becca = ? total boxes

B	3	X = 105
Tot. B+J	3+8=11	385

(Note: An arrow labeled 'x 35' points from the '3' in the first row to the '105' in the second row. Another arrow labeled 'x 35' points from the '385' in the second row to the '105' in the first row.)

$$\begin{array}{r} 35 \\ 11 \overline{) 385} \\ \underline{-33} \\ 55 \\ \underline{-55} \\ 0 \end{array}$$

$$\begin{array}{r} 35 \\ \times 3 \\ \hline 105 \end{array}$$

Becca sold 105 boxes

part:total

4) The ratio of soda to water is 2:3. If there are 500 drinks, how many are Soda?

Given

Soda 2 : water 3
500 drinks total

Find

Soda = ? total

Soda	2	X = 200
drinks (soda + H ₂ O)	5	500

(Note: An arrow labeled 'x 100' points from the '2' in the first row to the '200' in the second row. Another arrow labeled 'x 100' points from the '500' in the second row to the '200' in the first row.)

200 drinks are Soda.