Multiplying and Dividing Fractions WP Carousel

I Multiply When I See...

I Divide When I See...

Card Number	Color Card	Operation	Write the Expression	How Do You Know?
Example				
1				
2				
3				
4				
5				
6				
7				

Multiplying and Dividing Fractions WP Carousel

I Multiply When I See...

Part (of) a Whole/Part

Situation suggests repeated
                    addition

product

times   Find Total

I Divide When I See...

Sharing / separating /
cutting / slicing

How many are in ...

Given Total
        Break Apart

Card Number	Color Card	Operation	Write the Expression	How Do You Know?
Example		$\frac{o}{o}$	$16\frac{1}{2} \div 12$	Boxes are divided or shared among players
1		$\circ$	$10 \circ \frac{2}{3}$	Looking for total after 10 batches
2		$\frac{o}{o}$	$12 \div \frac{1}{9}$	Separating the M&M's into groups/bags
3		$\bullet$	$24 \circ 1\frac{1}{3}$	Repeated addition of $1\frac{1}{3}$; 24 times
4		$\frac{o}{o}$	$9\frac{2}{3} \div 6$	Looking for each type of fruit from total ($9\frac{2}{3}$)
5		$\frac{o}{o}$	$6\frac{2}{3} \div \frac{1}{5}$	How many $\frac{1}{5}$ are in $6\frac{2}{3}$
6		$\circ$	$2\frac{1}{4} \circ 1\frac{1}{2}$	$x\frac{1}{4}/1$ recipe batch → $2\frac{1}{4}$ cups $\quad 1\frac{1}{2} \quad \rightarrow \quad x1\frac{1}{2}$
7		$\frac{o}{o}$	$\frac{3}{4} \div 5$	Equally divided by 5

Carousel Word Problems Classwork   Name _____

<u>Directions: Answer the 3 Questions and then Show the Work To Solve the Problem.</u>

Example: The soccer team has $16\frac{1}{2}$ boxes of wrapping paper left to sell. If each of the 12 players sells the same amount, how many boxes should each player sell?
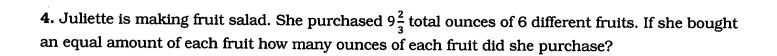
Q1: The number of boxes each player sells should be _____ than the total boxes.

Q2: Which Answer makes sense?   **198** boxes $1\frac{3}{8}$ boxes $\frac{8}{11}$ boxes

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

_____

_____

Compute:

1. David made 10 batches of muffins. He used $\frac{2}{3}$ cup of milk in each batch. How much milk does David use?

Q1: The number of cups of milk should be _____ than 10.

Q2: Which Answer makes sense? $6\frac{2}{3}$ cups   **15** cups $\frac{1}{15}$ cups

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

_____

_____

Compute:

2. Jayden has a 12 pound bag of M&M's. He needs to separate the M&M's into $\frac{1}{9}$ pound bags. How many bags can he make?

Q1: The number of bags the M&M's are separated into should be _____ than 12.

Q2: Which Answer makes sense? 108 bags $\quad 1\frac{1}{3}$ bags $\quad \frac{1}{108}$ of a bag

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

_____

_____

Compute:

3. How wide is a floor made from 24 tiles that are each $1\frac{1}{3}$ foot wide?

Q1: The floor should be _____ than 24 feet.

Q2: Which Answer makes sense? 2 feet wide $\quad \frac{1}{15}$ feet wide $\quad 32$ feet wide

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

_____

_____

Compute:

4. Juliette is making fruit salad. She purchased $9\frac{2}{3}$ total ounces of 6 different fruits. If she bought an equal amount of each fruit how many ounces of each fruit did she purchase?

5. Mariska has $6\frac{2}{3}$ pound of sunflower seeds. Each day, she feeds the cardinals in her yard $\frac{1}{5}$ pound of seeds. For how many days will she be able to feed the cardinals?

6. A waffle recipe calls for $2\frac{1}{4}$ cups of flour. If Chun wants to make $1\frac{1}{2}$ times the recipe, how much flour does he need?

7. Carlota has $\frac{3}{4}$ ton of mulch she is going to evenly divide among 5 flower beds. How much will each flower bed contain?

Directions: Answer the 3 Questions and then Show the Work To Solve the Problem.

Example: The soccer team has $16\frac{1}{2}$ boxes of wrapping paper left to sell. If each of the 12 players sells the same amount, how many boxes should each player sell?

Q1: The number of boxes each player sells should be ___Smaller___ **than the total boxes.**

Q2: Which Answer makes sense?   ~~198 boxes~~ $\boxed{1\frac{3}{8} \text{ boxes}}$ ~~$\frac{8}{11}$ boxes~~

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

198 doesn't make sense beccuse there are not that many boxes to sell in total

Compute:

$$16\frac{1}{2} \div 12$$

$$\frac{33}{2} \div \frac{12}{1}$$

$$^{11}\frac{\cancel{33}}{2} \cdot \frac{1}{\cancel{12}_4} = \frac{11}{8} = \boxed{1\frac{3}{8} \text{ boxes}}$$

1. David made 10 batches of muffins. He used $\frac{2}{3}$ cup of milk in each batch. How much milk does David use?

Q1: The number of cups of milk should be ___less___ **than 10.**

Q2: Which Answer makes sense? $\boxed{6\frac{2}{3} \text{ cups}}$ 15 cups $\frac{1}{15}$ cups

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

$\frac{1}{15}$ doesn't make sense beccuse thats not enough to make 1 batch let alone 10.

Compute:

$$10 \cdot \frac{2}{3}$$

$$\frac{10}{1} \cdot \frac{2}{3} = \frac{20}{3} = \boxed{6\frac{2}{3} \text{ cups}}$$

2. Jayden has a 12 pound bag of M&M's. He needs to separate the M&M's into $\frac{1}{9}$ pound bags. How many bags can he make?

Q1: The number of bags the M&M's are separated into should be <u>bigger</u> **than 12.**

Q2: Which Answer makes sense? (108 bags) $1\frac{1}{3}$ bags $\frac{1}{108}$ of a bag

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

$\frac{1}{108}$ doesnt make sense beccuse you ecn fill more then 1 bag at lecst.

Compute:

$12 \div \frac{1}{9}$

$\frac{12}{1} \cdot \frac{9}{1} = \frac{108}{1} = \boxed{108 \text{ bags}}$

3. How wide is a floor made from 24 tiles that are each $1\frac{1}{3}$ foot wide?

Q1: The floor should be <u>Wider</u> **than 24 feet.**

Q2: Which Answer makes sense? 2 feet wide $\frac{1}{15}$ feet wide   (32 feet wide)

Q3: Pick one of the answers that DON'T MAKE SENSE and EXPLAIN WHY

2 ft docsnt make sense because thats the width of 1 ~~tile~~ tile and a little more. NoT 24 tiles

Compute:

$24 \cdot 1\frac{1}{3}$

$\frac{\overset{8}{24}}{1} \cdot \frac{4}{\underset{1}{3}} = \frac{32}{1} = \boxed{32 \text{ feet wide}}$

4. Juliette is making fruit salad. She purchased $9\frac{2}{3}$ total ounces of 6 different fruits. If she bought an equal amount of each fruit how many ounces of each fruit did she purchase?

Total split up among 6 fruits

$$9\frac{2}{3} \div 6$$

$$\frac{29}{3} \div \frac{6}{1}$$

$$\frac{29}{3} \cdot \frac{1}{6} = \frac{29}{18} = \boxed{1\frac{11}{18} \text{ ounces of each fruit}}$$

5. Mariska has $6\frac{2}{3}$ pound of sunflower seeds. Each day, she feeds the cardinals in her yard $\frac{1}{5}$ pound of seeds. For how many days will she be able to feed the cardinals?

How many $\frac{1}{5}$ are in $6\frac{2}{3}$

$$6\frac{2}{3} \div \frac{1}{5}$$

$$\frac{20}{3} \div \frac{1}{5}$$

$$\frac{20}{3} \cdot \frac{5}{1} = \frac{100}{3} = \boxed{33\frac{1}{3} \text{ days}}$$

6. A waffle recipe calls for $2\frac{1}{4}$ cups of flour. If Chun wants to make $1\frac{1}{2}$ times the recipe, how much flour does he need?

$$2\frac{1}{4} \cdot 1\frac{1}{2}$$

$$\frac{9}{4} \cdot \frac{3}{2} = \frac{27}{8} = \boxed{3\frac{3}{8} \text{ cups of flour}}$$

7. Carlota has $\frac{3}{4}$ ton of mulch she is going to evenly divide among 5 flower beds. How much will each flower bed contain?

$$\frac{3}{4} \div 5$$

$$\frac{3}{4} \cdot \frac{1}{5} = \boxed{\frac{3}{20} \text{ ton of mulch in each flower bed}}$$