## BAKING BREAD

Kelly was baking bread but could only find her $\frac{1}{8}$-cup measuring cup. She needs $\frac{1}{4}$ cup sugar, $\frac{3}{4}$ cup whole wheat flour, and $\frac{1}{2}$ cup all-purpose flour. How many $\frac{1}{8}$ cups will she need for each ingredient?

## SHOW YOUR WORK:

ANSWER:

## RUNNING WITH THE REYNOLDS

Mr. and Mrs. Reynolds went for a run. Mr. Reynolds ran for $\frac{6}{10}$ mile. Mrs. Reynolds ran for $\frac{2}{5}$ mile. Who ran farther? Explain how you know. Use the benchmarks $0, \frac{1}{2}$, and 1 to explain your answer.

## SHOW YOUR WORK:

ANSWER:

## WHO RAN THE FARTHEST?

Jamal ran $\frac{2}{3}$ miles. Ming ran $\frac{2}{4}$ miles. Laina ran $\frac{7}{12}$ miles. Who ran the farthest? What do you think is the easiest way to determine the answer to this question? Explain your thinking.

## PLOTTING POINTS PART 1

A. Plot the following points on the number line without measuring:
i. $\frac{1}{3}$
ii. $\frac{3}{6}$
iii. $\frac{7}{12}$

B. Use the Number Line in Part A to compare the fractions by writing $>,<$, or $=$ on the lines.

$$
\text { i. } \frac{7}{12}=\frac{1}{2}
$$

ii. $\frac{7}{12}=\frac{5}{6}$

## PLOTTING POINTS PART 2

A. Plot the following points on the number line without measuring:
i. $\frac{11}{12}$
ii. $\frac{1}{4}$
iii. $\frac{3}{8}$

B. Select two fractions from Part A, and use the given number line to compare them by writing $>$, $<$, or $=$.

C. Explain how you plotted the points in Part A.

## SHADES OF A RECTANGLE

A. The rectangle below has length 1 . What fraction does the shaded part represent?

## ANSWER:


B. The rectangle below has the same length as the rectangle above.

What fraction does the shaded part represent?


ANSWER:
C. Use the pictures to explain why the two fractions represented above are equivalent.

## BUILDING A DECK

The length of a rectangular deck is 4 times its width. If the deck's perimeter is 30 feet, what is the deck's area?

## SHOW YOUR WORK:

ANSWER:

## HOW MUCH MONEY DID THEY RAISE?

A. Helen raised $\$ 12$ for the food bank last year and she raised 6 times as much money this year. How much money did she raise this year?
B. Sandra raised $\$ 15$ for the PTA and Nita raised $\$ 45$. How many times as much money did Nita raise as compared to Sandra?
C. Luis raised $\$ 45$ for the animal shelter, which was 3 times as much money as Anthony raised. How much money did Anthony raise?

## SHOW YOUR WORK:

## ANSWER:

## SNAKES AT THE ZOO

There are two snakes at the zoo, Jewel and Clyde. Jewel was six feet and Clyde was eight feet. A year later Jewel was eight feet and Clyde was 10 feet. Which one grew more?

## SHOW YOUR WORK:

ANSWER:

## WHO SOLD THE MOST CHOCOLATE?

Jared sold 194 Boy Scout chocolate bars. Matthew sold three times as many as Jared. Gary sold 297 fewer than Matthew. How many bars did Gary sell?

## SHOW YOUR WORK:

ANSWER:

## WRITE AS A FRACTION

## Write $11 \div 5$ as a fraction.

Place a point that shows this number on the number line below.

## SHOW YOUR WORK:

## ANSWER:



## GREATER THAN, LESS THAN, OR EQUAL TO

Write >, < , or = to make each comparison true.
A.
$2 \div 3$ $\qquad$ $2 \div \frac{1}{3}$
B. $\quad 0.2 \times \frac{1}{4}$ $-\frac{2}{10} \times \frac{1}{3}$
C. $\frac{1}{6} \div 4 \quad \frac{1}{6} \times \frac{1}{5}$

## JACKSON'S REASONING

Jackson claims that multiplication always makes a number bigger. He gave the following examples:

- If I take 6 , and I multiply it by 4 , I get 24 , which is bigger than 6.
- If I take $\frac{1}{4}$, and I multiply it by 2 (whole number), I get $\frac{2}{4}$ or $\frac{1}{2}$ which is bigger than $\frac{1}{4}$.

Jackson's reasoning is incorrect. Give an example that proves he wrong, and explain his mistake using pictures, words, or numbers.

SHOW YOUR WORK:

ANSWER:

## FILL IN THE BLANK MULTIPLICATION

## Multiply.

a. $\frac{1}{3}$ of 2 feet $=$ $\qquad$ inches
b. $\frac{1}{6}$ of 3 yards $=\ldots$ feet
c. $\left(3+\frac{1}{2}\right) \times 14=$
d. $4 \frac{2}{3} \times 13=$

## SHOW YOUR WORK:

ANSWER:

## MRS. WILLIAMS' RICE CRISPY TREATS

Mrs. Williams uses the following recipe for rice crispy treats.
She decides to make $\frac{2}{3}$ of the recipe.

- 2 cups of melted butter
- 24 oz marshmallows
- 13 cups rice crispy cereal
A. How much of each ingredient will she need? Write an expression that included multiplication. Solve by multiplying.
B. How many fluid ounces of butter will she use? (Use your measurement conversion chart, if you wish.)
C. When the rice crispy treats have cooled, Mrs. Williams cuts them into 30 equal pieces. She gives two-fifths of the treats to her son and takes the rest to school. How many treats will Mrs. Williams take to school? Use any method to solve.


## BAKING RAISIN COOKIES

The baker needs $\frac{5}{8}$ cups of raisins for one batch of cookies. How many raisins will he need for 7 batches of cookies?

SHOW YOUR WORK:

ANSWER:

## THE RELAY TEAM

Eight students are on a relay team. Each run 1 and $\frac{3}{4}$ kilometers. How many total kilometers does their team run?

## SHOW YOUR WORK:

ANSWER:

## SOLVING MULTIPLICATION PROBLEMS

Solve using any method.
A. $7 \times \frac{3}{4}$
B.
$9 \times \frac{2}{5}$
C. $60 \times \frac{5}{8}$

## SHOW YOUR WORK:

## ANSWER:

## MULTIPLYING MIXED NUMBERS BY WHOLE NUMBERS

Using the digits 1 through 9 at most one time each, fill in the boxest to make the smallest (or largest) product.


SHOW YOUR WORK:

## RHONDA'S EXERCISE PLAN

# Rhonda exercised for $\frac{5}{6}$ of an hour for five days. How many total hours did Rhonda exercise? 

## SHOW YOUR WORK:

ANSWER:

## IDENTIFY CONNECTIONS BETWEEN NUMBER PAIRS

For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the x -axis? Circle your answer(s). Without plotting them, explain how you know.
A. $(3.2,7)$ and $(5,7)$
B. $(8,8.4)$ and $(8,8.8)$
C. $\left(6 \frac{1}{2}, 12\right)$ and $(6.2,11)$

## PLOTTING ON A COORDINATE PLANE

Complete the chart. Then, plot the points on the coordinate plane.

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 0 | 4 |  |
| 2 | 6 |  |
| 3 | 7 |  |
| 7 | 11 |  |

1. Use a straightedge to draw a line connecting these points.
2. Write a rule to show the relationship between the $x$ - and $y$-coordinates for points on the line.
3. Name two other points that are also on this line.

$\qquad$
$\qquad$

## ANSWER:

## PLOTTING BASED ON RULES

Complete the table for the given rules.

Line e
Rule: $y$ is twhe as much as $x$

| $x$ | $y$ | $(x, y)$ |
| :--- | :--- | :--- |
| 0 |  |  |
| 2 |  |  |
| 5 |  |  |
| 9 |  |  |



Ruter $y$ is holfos much as $x$

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 0 |  |  |
| 6 |  |  |
| 10 |  |  |
| 20 |  |  |

A. Construct each line on the coordinate plane above.
B. Compare and contrast these lines.
C. Based on the patterns you see, predict what line g , whose rule is " y is 4 times as much as x" would look like? Draw your prediction in the plane above.

## COORDINATE PLANE Q\&A

Use the coordinate plane to answer the questions.
A. Use a straightedge to construct a line that goes through points A and B. Label the line g .
B. Line g is parallel to the
$\qquad$ -axis and is
perpendicular to the $\qquad$ axis.
C. Draw two more points on line g. Name them C and D.

D. Give the coordinates of each point below:

A: $\qquad$
c: $\qquad$

B: $\qquad$

D: $\qquad$
E. What do all the points on line g have in common?
F. Give the coordinates of another point that falls on line $g$ with an $x$ axis coordinate greater than 25.

## PEARL'S STICKERS

Pearl buys 125 stickers. She gives 53 stickers to her little sister. Pearl then puts 9 stickers on each page of her album. If she uses all of her remaining stickers, how many pages does Pearl put stickers on?

## SHOW YOUR WORK:

ANSWER:

## MARIA'S RIBBONS

A. Maria cuts 12 feet of ribbon into 3 equal pieces so she can share it with her two sisters. How long is each piece?
B. Maria has 12 feet of ribbon and wants to wrap some gifts. Each gift needs 3 feet of ribbon. How many gifts can she wrap using the ribbon?

## SHOW YOUR WORK:

ANSWER:

## BOXES OF CUPS \& BAGS OF PEARS

Eighteen cups are equally packed into 6 boxes. Two boxes of cups break. How many cups are unbroken? Twenty-seven pears are packed in bags of 3 . Five bags of pears are sold. How many bags of pears are left?

## SHOW YOUR WORK:

ANSWER:

## MR. NGUYEN'S PLANTS \& ANNA'S SEEDS

A. Mr. Nguyen plants 24 trees around the neighborhood pond. He plants equal numbers of maple, pine, spruce, and birch trees. He waters the spruce and birch trees before it gets dark. How many trees does Mr . Nguyen still need to water? Draw and label a tape diagram.
B. Anna buys 24 seeds and plants 3 in each pot. She has 5 pots. How many more pots does Anna need to plant all of her seeds?

## EUDORA'S RIBBONS

Eudora buys 21 meters of ribbon. She cuts the ribbon so that each piece measures 3 meters in length.
A. How many pieces of ribbon does she have?
B. If Eudora needs a total of 12 pieces of the shorter ribbon, how many more pieces of the shorter ribbon does she need?

## SHOW YOUR WORK:

## ANSWER:

