## End-of-Year Assessment

(1) Annabelle is measuring the widths of coins from around the world.

Create a line plot using her measurement data.


| Measures of World Coins |  |
| :---: | :---: |
| Measure | Number of Coins |
| $\frac{1}{2} \mathrm{in}$. | $/ / /$ |
| $\frac{3}{4} \mathrm{in}$. | $/ /$ |
| 1 in. | $/ / / /$ |
| $1 \frac{1}{4} \mathrm{in}$. | $/ /$ |
| $1 \frac{1}{2} \mathrm{in}$. | $/$ |

Measure the widths of these two coins to the nearest $\frac{1}{4}$ inch. Add the data to your line plot.

about $\qquad$ in.

about $\qquad$ in.
(2) Label each section of the fraction strip with a unit fraction.

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## End-of-Year Assessment (continued)

(3) Fill in the missing factor in the Fact Triangle.

Explain how you figured out the missing factor.
$\qquad$
$\qquad$

$\qquad$
$\qquad$
(4) Five friends win $\$ 75$ in a contest.

They agree to share the money equally.
How much money does each friend get?
The letter $D$ represents the number of dollars per friend.
(number model with letter)
They have $\$ 10$ bills and $\$ 1$ bills.
Use numbers or pictures to show how much money each friend gets.

Answer: $\qquad$
(unit)

## End-of-Year Assessment (continued)

(5) Jacob solved $6 \times 7$ like this: $(3 \times 7)+(3 \times 7)=21+21=42$. He solved $16 \times 5$ like this: $(8 \times 5)+(8 \times 5)=40+40=80$.
a. What is the same about Jacob's strategy for both problems?
$\qquad$
$\qquad$
b. Show how you can use Jacob's strategy to solve $8 \times 9$.
c. Write another multiplication problem that you could solve using Jacob's strategy.

Explain how Jacob's strategy works for your problem.
$\qquad$
$\qquad$
(6) a. Partition and shade the circles to show $\frac{2}{2}=\frac{6}{6}$.

b. Explain why the circles shown above must be the same size.
$\qquad$
$\qquad$

## End-of-Year Assessment (continued)

## Rules for the Order of Operations

1. Do operations inside parentheses first.

Follow Rules 2 and 3 when computing inside parentheses.
2. Then multiply or divide, in order, from left to right.
3. Finally add or subtract, in order, from left to right.
(7) a. Use the order of operations to solve these number sentences.

$$
\begin{aligned}
& 45-12 \times 0= \\
& (45-12) \times 0=
\end{aligned}
$$

b. Explain why the two number sentences have different answers.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(8) Edie is planting a 6 -foot by 15 -foot flower garden.

She is planting sunflowers in one part and daisies in the other part.
Daisies
Sunflowers

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Write one or more number models that represent how you can find the area of the garden.

Total area of Edie's garden: $\qquad$ square feet

## End-of-Year Assessment (continued)

(9) A collection of 6 movie tickets is shared equally among 3 families.

How many tickets does each family get? $\qquad$ tickets
What fraction of the collection of movie tickets does each family get?
Each family gets $\bar{\square}$ of the tickets.
(10) During a game of Fraction Memory, Marta turns over these two cards:


She thinks she found a pair of equivalent fractions.
a. Do you agree? Explain your thinking.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
b. Use your fraction cards to find a pair of equivalent fractions. Record your two fractions on the lines below.
$\qquad$ $=$ $\qquad$
c. How do you know the fractions are equivalent?
$\qquad$
$\qquad$
$\qquad$

## End-of-Year Assessment (continued)

(11) Write $>,<$, or $=$ to make the number sentences true. You may use your fraction tools.
a. 1 $\frac{4}{4}$
b. $\frac{3}{3}$ $\qquad$ $\frac{4}{4}$
c. $\frac{3}{4}$ $\qquad$ $\frac{4}{4}$
d. $\frac{1}{2}$ $\qquad$ $\frac{1}{6}$
e. $\frac{3}{1}$ 3
f. What do you notice about the fractions in Parts a and b?
(12)



If you pour the water from Beakers $A$ and $B$ into
Beaker C, will Beaker C be full? Hint: 1 L = 1,000 mL $\qquad$
What volume of water will be in Beaker $C$ after you pour in water from Beakers $A$ and $B$ ? about $\qquad$
Shade Beaker C to show the total liquid volume.
How much more water would you need to fill Beaker C?
about $\qquad$ (unit)

## End-of-Year Assessment (continued)

a. Partition this number line into eighths. Label with fractions.

b. Compare these fractions. Write $>,<$, or $=$ to make the number sentences true. Use your number line.
$\frac{8}{8}$ $\qquad$ 1
$\frac{2}{8}$ $\qquad$ $\frac{1}{2}$
(14) Arjun has 12 eggs.

He uses 2 eggs for each omelet and makes 3 omelets.
How many eggs does he have left?
Write one or more number models that match the story.
Use a letter for what you are trying to find out.
The letter $\qquad$ represents $\qquad$ .
(number model(s) with letter)

Arjun has $\qquad$ left. (unit)
Check whether your answer makes your number model(s) true. Write your number model(s) with your answer.

## End-of-Year Assessment (continued)

(15) Sylvie ran $\frac{3}{8}$ of a mile. Ivan ran $\frac{3}{4}$ of a mile.

Partition and use the number lines below to show how far they ran.
Sylvie


Ivan


Who ran farther? Explain how you know.
(16) Mario's baseball practice ends at 7:30 p.м. His mom leaves to pick him up at 7:15 p.m. It takes her 25 minutes to get to the baseball field. Will she arrive on time? Explain.

## End-of-Year Assessment (continued)

(17) Solve the extended multiplication facts.
a. $60 \times 7=$ $\qquad$
b.

$$
=40 \times 3
$$

c. $\qquad$ $=70 \times 8$
d. $6 \times$ $\qquad$ $=240$
e. What basic fact could help you solve Part d?
(18) Draw two different rectangles that each have an area of 36 square units. Label your rectangles A and B. Write a number model for finding the area of each rectangle.

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The perimeter of Rectangle A is $\qquad$ units.

The perimeter of Rectangle B is $\qquad$ units.

## End-of-Year Assessment (continued)

(19) a. Find the missing side lengths of this rectilinear figure.

Then find the area. Remember to include the unit.


The letter A represents the total area of the figure.
Number model(s): $\qquad$

Area: $\qquad$ (unit)
b. How did you figure out the missing side lengths?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## End-of-Year Assessment (continued)

(20) Two third-grade teams run races at Field Day. They run around the rectangular fields marked with cones and compare times. Gabriel says that the race is not fair because the distance around Field 1 is longer. Find the perimeter of each field.


Perimeter of Field 1: $\qquad$
(unit)
Perimeter of Field 2: $\qquad$
Is the race fair? Explain your answer.
$\qquad$
$\qquad$
$\qquad$

## End-of-Year Assessment (continued)

(21) Circle all the rectangles, mark an $X$ on all the squares, and shade all the rhombuses.


Explain why the shapes you circled are rectangles.

Draw another quadrilateral that is NOT a rectangle, a square, or a rhombus.
(22) Solve. Make an estimate to check whether your answer makes sense.
a. Estimate:
$\qquad$
461
$\begin{array}{r}469 \\ +2 \\ \hline\end{array}$
b. Estimate:
$\qquad$
348
$-154$

