Name _____ Date _____

Juice Box Mixup

A school needed 240 *four-packs* of juice boxes for a field trip. However, the school accidentally bought 240 *six-packs* of juice boxes. How many extra juice boxes did the school buy?

Name _____ Date _____

Water Relief

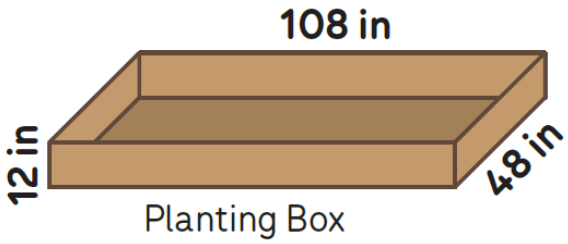
After a hurricane, the 12 residents of a nursing home didn't have any clean water to drink. Their neighbors donated 40 gallons of bottled water, which would provide _____ gallons for each resident.

Answer: _____

Name _____ Date _____

Neighborhood Garden

A neighborhood garden will have 6 wooden planting boxes. Every box will have the same shape (see diagram).



Planting Box

Soil can be bought by the truckload; a truckload is 54 ft^3 of soil. How many truckloads of soil will fill all of the boxes?

Answer: _____

Student Name _____ Date _____

(1) Circle T for true or F for false.

a. 9 thousandths + 5 hundredths > 3 hundredths + 2 tenths T F

b. 92 hundredths + 4 thousandths > 0.924 T F

c. 0.456 < 0.5 T F

(2) Write each number in the requested form.

a. 7 thousandths + 5 tenths = _____ (decimal)

b. 0.1 tenths = _____ (decimal)

c. $\frac{2}{100} + \frac{5}{1000}$ = _____ (decimal)

= _____ (fraction in lowest terms)

Name _____ Date _____

Calculating

Write the requested values.

(a) $\begin{array}{r} 4087 \\ \times \quad 53 \\ \hline \end{array}$ (b) $\begin{array}{r} 246 \\ \times \quad 914 \\ \hline \end{array}$ (c) $12\overline{)9744}$ (d) $6\overline{)1461}$

(e) $4 - (8 - 4) =$ ____

(f) $\frac{1}{10} \div 10 =$ ____

(g) $\frac{7}{8} \times \frac{5}{3} =$ ____

(h) $8 \times$ ___ $= 73$

(i) $3 \div \frac{1}{8} =$ ____

(j) $\frac{1}{2} + \frac{1}{3} - \frac{1}{5} =$ ____

(k) $\frac{1}{3} \div (6 \times 5) =$ ____

(l) $0.4 \times 0.9 =$ ____

(m) $0.75 \div 0.01 =$ ___

(n) $0.63 \div 0.3 =$ ____

(o) $0.86 + 0.4 =$ ____

(p) $0.72 - 0.17 =$ ___

(q) $0.02 + 0.2 =$ ____

(r) $0.8 - 0.55 =$ ____

(s) $637 - 1.31 =$ ____

Name _____ Date _____

Corner Store

(1) Arya and Lily's house is $\frac{1}{5}$ mile from the store.

(a) Arya ran $\frac{1}{3}$ of the way from her house to the store. How far, in miles, did Arya run?

(b) Lily ran $\frac{2}{3}$ of the way from her house to the store. How far, in miles, did Lily run?

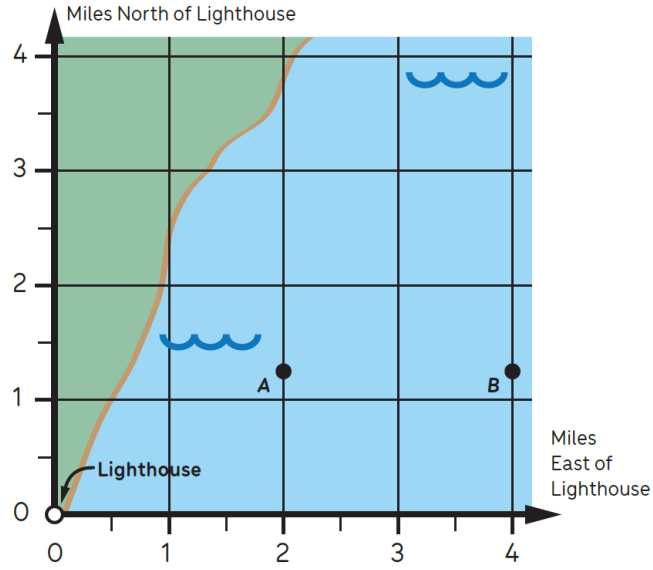
(2) It Is $\frac{2}{5}$ mile from Leon's house to the store.

(a) Leon ran $\frac{1}{3}$ of the way from his house to the store. How far, in miles, did Leon run?

(b) Compare how far Leon and Lily ran; what do you notice, and why Is It true?

Student Name _____ Date _____

Shipwrecks



The map shows an ocean near a coastline. Shipwrecks are at locations $A\left(2, 1\frac{1}{4}\right)$ and $B\left(4, 1\frac{1}{4}\right)$. Shipwrecks are also at locations $C\left(4, 3\frac{1}{2}\right)$ and $D\left(2, 3\frac{1}{2}\right)$.

(1) Mark locations *C* and *D* on the map and shade rectangle *ABCD*.

(2) Some believe there is sunken treasure in the region you shaded. How large is that region in mi^2?

Name _____ Date _____

Alana's New Shape Category

A *scalene triangle* is a triangle in which the sides all have different lengths. Thinking about this, Alana decided there should also be a name for quadrilaterals in which the sides all have different lengths. She said, “I’ll name them after myself.” She defined an *alana-gon* to be a quadrilateral in which the four sides all have different lengths.

(1) Draw an example of an alana-gon.

(2) True or false:

(a) All squares are alana-gons. _____

(b) No trapezoids are alana-gons. _____

Name _____ Date _____

Walkathon

On Saturday there was a walkathon.

Catherine

I walked $\frac{1}{3}$ mile farther than Leslie.

I walked $1\frac{1}{4}$ mile.

How many miles did Leslie walk?

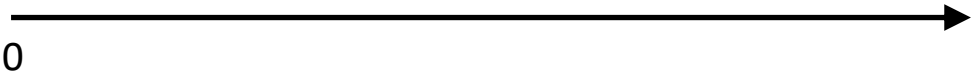
Name _____ Date _____

Number System, Number Line

(1) Solve: $\frac{1}{3} = 0.1 + ?$

(2) Is there a number greater than $\frac{1}{5}$ and less than $\frac{1}{4}$? If you think so, find such a number. If think there Is no such number, explain why.

(3) Show one of the above problems and Its solution on a number line.



Name _____ Date _____

Juliet's Rectangle

Juliet said, “I’m thinking of a rectangle. Its area is 1 square unit. Its perimeter is more than 1 million units.”

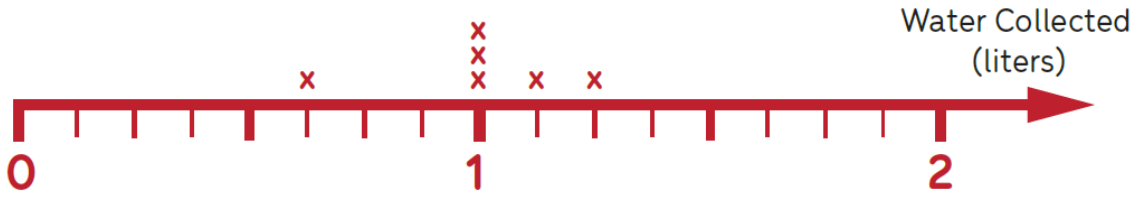
(1) Is Juliet thinking of something possible or impossible? Use math to decide for sure.

(2) Explain your reasoning to your classmates. Revise your explanation based on suggestions from your classmates.

Name _____ Date _____

Rain Measurements

Before it rained, the teacher went outside and placed identical baking pans on the ground. After it rained, the teacher brought the pans inside, and students measured how much water was collected in each pan.



If all the water collected were shared equally among the pans, how much water would be in each pan?

Name _____ Date _____

Frozen Yogurt Machine

In a snack shop there is a frozen yogurt machine. When there is 3 / of frozen yogurt in the machine, the machine is $\frac{1}{3}$ full. How much frozen yogurt is in the machine when it is $\frac{1}{4}$ full?

Name _____ Date _____

Brandon's Equation

Brandon was reading his math book. He saw the equation

$$\frac{3}{4} \times \left(4 + \frac{1}{2}\right) = 3 + \frac{3}{8}$$

He said, "I don't get it. Where did the 3 and the $\frac{3}{8}$ come from?" Write an explanation that could answer Brandon's question.