Name _____ Class _____

Summer Homework – Incoming 6th Grade

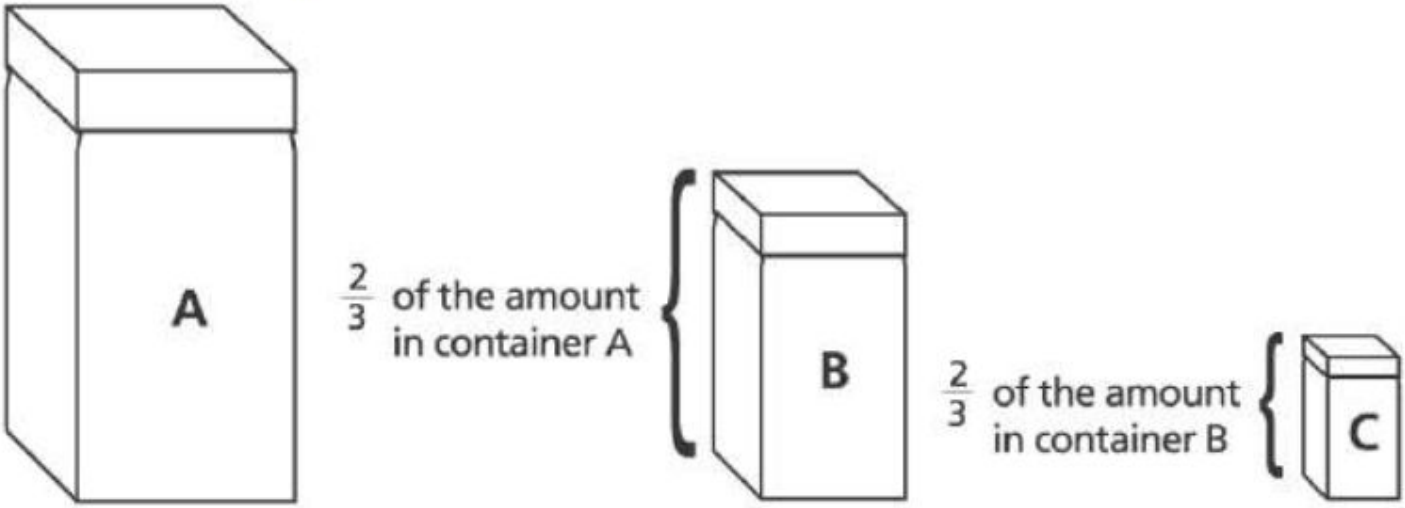
There are some IXL Assignments and 4 Problem Solving Tasks to complete. If you need more room to either show work or explain your thinking please attach a separate paper. When you do your IXL assignments please include the date of completion and your score.

IXL Assignment	Date Completed - **completion means a score of at least 85.**	Score Obtained
6 A.6 Add and subtract whole numbers		
6 B8 Estimate products		
6 C.4 Estimate quotients		
6F.1 What decimal number is illustrated		
6 F.2 Decimal place values		
6 F.4 Put decimal numbers in order		
6 F.4 Put decimal numbers in order		
6 I.4 Equivalent fractions review		
6 I.7 Compare fractions with like and unlike denominators		
6 I.15 Put a mix of decimals, fractions, and mixed numbers in order		

SHOW YOUR WORK OR EXPLAIN IN THE SPACE PROVIDED. IF YOU NEED MORE SPACE YOU MAY ATTACH AN EXTRA PAPER.

1)

The diagram below shows a set of three different-sized containers Tanner used for storing dry goods. The largest container held $12\frac{3}{4}$ cups of dry goods.



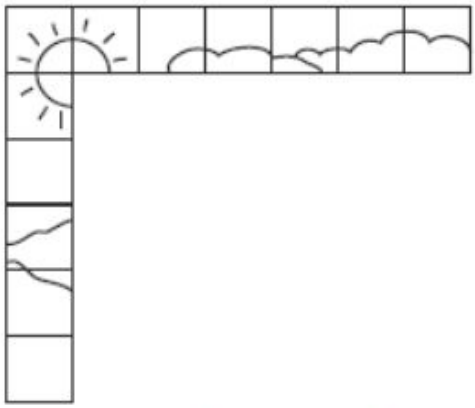
What was the total amount, in cups, of dry goods that Tanner could store in all three containers?

Show your work:

Answer: _____

2)

Tony began putting together a rectangular puzzle. He completed the top edge and left edge of the puzzle, as shown below. Each piece is a square that has a side length of $2\frac{1}{4}$ inches.



What is the total area, in square inches, of the completed puzzle?

Show your work:

Answer: _____

3) **SHOW YOUR WORK**

Molly bought 12.5 yards of fabric for $4.50 a yard to make dog beds. She uses 2.5 yards of fabric for each dog bed. She sells each dog bed for $17.50. After subtracting the cost of the fabric, how much money does Molly earn if she sells all of the dog beds?

Answer: _____

4) a. If 358 x 25 = 8,950 would the answer to 3.58 x 25 be larger or smaller than 8,950? **EXPLAIN** how you know.

b)If $12 \div 2 = 6$, would $12 \div 0.2$ be larger or smaller than 6? **EXPLAIN** how you know.

5) Compare the expressions below. **WITHOUT EVALUATING,** identify if the first expression is greater than (>), less than (<) or equal to (=) the second expression. **IN EACH CASE EXPLAIN HOW YOU KNOW.**

a. $2 \times \left(2\frac{1}{4} - \frac{5}{6}\right)$ _____ $\frac{1}{2} \times \left(2\frac{1}{4} - \frac{5}{6}\right)$

b. $\left(2\frac{1}{4} + \frac{3}{4}\right) \div \frac{1}{5}$ _____ $\left(2\frac{1}{4} + \frac{3}{4}\right) \div 5$

c. $(8 \div 5) \times \frac{5}{5}$ _____ $8 \div 5$

d. $\left(\frac{3}{4}+\frac{2}{5}\right)\div 4$ _____ $\frac{1}{4}\times\left(\frac{3}{4}+\frac{2}{5}\right)$

e. $\frac{4}{3}\times\left(4\div\frac{1}{5}\right)$ _____ $\frac{3}{4}\times\left(4\div\frac{1}{5}\right)$

6) **SHOW YOUR WORK**

A-Plus Glass is making windows for a new house that is being built.

- There will be 15 windows that measure $4\frac{3}{4}$ feet long and $3\frac{3}{5}$ feet wide
- There will be 7 windows that measure $2\frac{4}{5}$ feet wide and $6\frac{1}{2}$ feet long.

How many square feet of glass will they need?

\

Answer: _____

7)

Andre says that $5\frac{3}{4}+2\frac{1}{4}=7\frac{1}{2}$ because $7\frac{4}{8}=7\frac{1}{2}$. Identify his mistake. Then find the correct sum. Use a number line or area model to support your answer.

Answer: _____

8)

Are the following expressions greater than $\frac{1}{2}$ or less than $\frac{1}{2}$? Circle one.

a.	$\frac{1}{5}+\frac{1}{4}$	Greater than $\frac{1}{2}$	Less than $\frac{1}{2}$
b.	$\frac{6}{7}-\frac{1}{6}$	Greater than $\frac{1}{2}$	Less than $\frac{1}{2}$
c.	$1\frac{1}{7}-\frac{5}{6}$	Greater than $\frac{1}{2}$	Less than $\frac{1}{2}$
d.	$\frac{4}{7}+\frac{1}{8}$	Greater than $\frac{1}{2}$	Less than $\frac{1}{2}$

EXPLAIN how to determine if a sum is greater than $\frac{1}{2}$ or less than $\frac{1}{2}$?

9)

Are the following expressions greater than 1 or less than one? Circle one.

a.	$\frac{1}{2}+\frac{4}{9}$	Greater than 1	Less than 1
b.	$\frac{5}{8}+\frac{3}{5}$	Greater than 1	Less than 1
c.	$1\frac{1}{5}-\frac{1}{3}$	Greater than 1	Less than 1
d.	$4\frac{3}{5}-3\frac{3}{4}$	Greater than 1	Less than 1

EXPLAIN how to determine if the expression is greater than 1 or less than 1?