

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Multiply or divide. Draw a model to explain your thinking.

a.  $\frac{1}{3} \times \frac{1}{4}$

b.  $\frac{3}{4}$  of  $\frac{1}{3}$

c.  $\frac{3}{4} \times \frac{3}{5}$

d.  $4 \div \frac{1}{3}$

e.  $5 \div \frac{1}{4}$

f.  $\frac{1}{4} \div 5$

2. Multiply or divide using any method.

a.  $1.5 \times 32$

b.  $1.5 \times 0.32$

c.  $12 \div 0.03$

d.  $1.2 \div 0.3$

e.  $12.8 \times \frac{3}{4}$

f.  $102.4 \div 3.2$

3. Fill in the chart by writing an equivalent expression.

a.	One-fifth the sum of one-half and one-third	
b.	Two and one-half times the sum of nine and twelve	
c.	Twenty-four divided by the difference between $1\frac{1}{2}$ and $\frac{3}{4}$	

4. A castle has to be guarded 24 hours a day. Five knights are ordered to split each day's guard duty equally. How long will each knight spend on guard duty in one day?
- a. Record your answer in hours.
- b. Record your answer in hours and minutes.
- c. Record your answer in minutes.

5. On the blank, write a division expression that matches the situation.

- a. \_\_\_\_\_ Mark and Jada share 5 yards of ribbon equally. How much ribbon will each get?
- b. \_\_\_\_\_ It takes half of a yard of ribbon to make a bow. How many bows can be made with 5 yards of ribbon?
- c. Draw a diagram for each problem and solve.

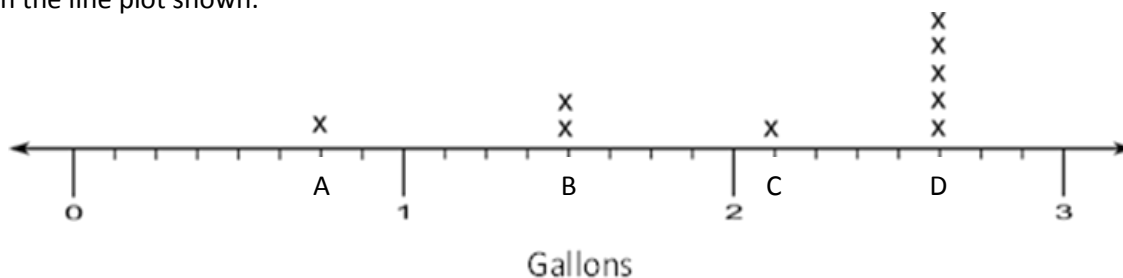
d. Could either of the problems also be solved by using  $\frac{1}{2} \times 5$ ? If so, which one(s)? Explain your thinking.

6. 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 is wrong, and explain his mistake using pictures, words, or numbers.

7. Jill collected honey from 9 different beehives and recorded the amount collected, in gallons, from each hive in the line plot shown:



a. She wants to write the value of each point marked on the number line above (Points A–D) in terms of the largest possible whole number of gallons, quarts, and pints. Use the line plot above to fill in the blanks with the correct conversions. (The first one is done for you.)

A. 0 gal 3 qt 0 pt

B. \_\_\_\_\_ gal \_\_\_\_\_ qt \_\_\_\_\_ pt

C. \_\_\_\_\_ gal \_\_\_\_\_ qt \_\_\_\_\_ pt

D. \_\_\_\_\_ gal \_\_\_\_\_ qt \_\_\_\_\_ pt