

# *Unit 7 Module 3*

## *Fractions as Parts of a Whole and Parts of a Set*

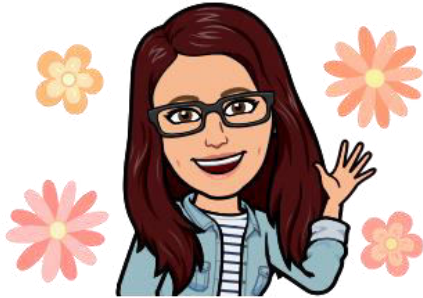
### *Session 1*

*Problem String-The Associative Property*  
*Problems and Investigations-Fractions on a Ruler*

Getting Ready-

- Construction paper (see preparation)
- Rulers, scissors, glue sticks
- Piece of chart paper
- Student journals

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CAN



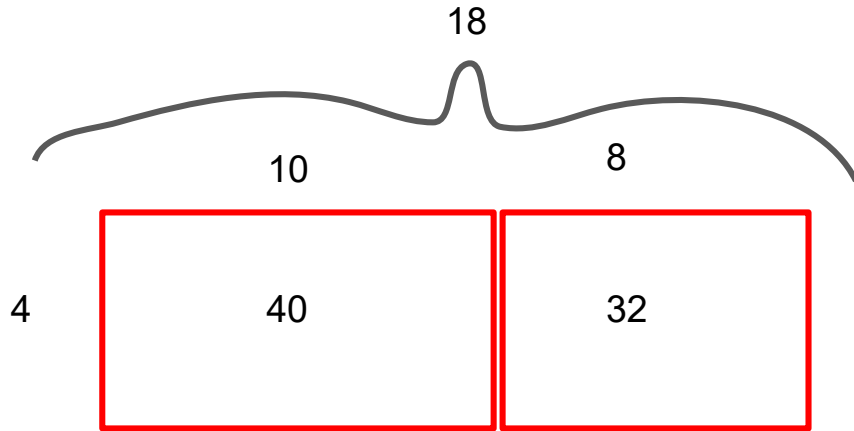
- Multiply using the associative property
- Identify equivalent fractions by comparing their sizes

# JOURNALS PLEASE



The Associative Property Part 1  
Date:

1.  $4 \times 18$



$$4 \times 18 = (4 \times \text{■}) + (4 \times \text{■})$$

$$\begin{array}{r} 4 \times 10 = \\ + 4 \times 8 = \\ \hline 4 \times 18 = \end{array}$$

2. 4x80

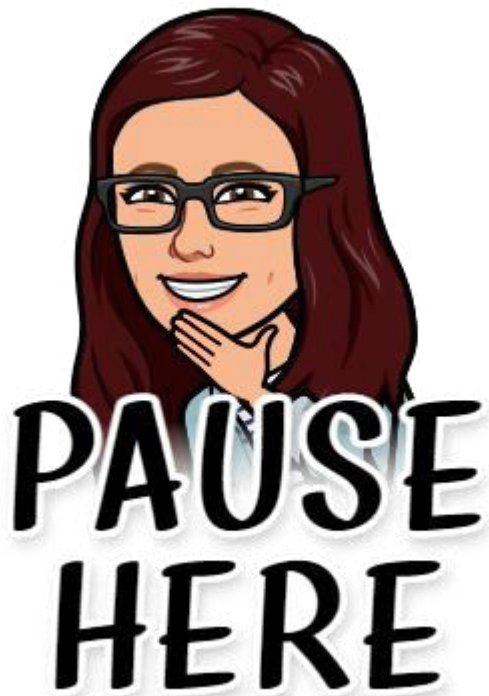
$$4 \times (8 \times 10) =$$

Or?

3.  $4 \times 800$

$$4 \times (8 \times 10) =$$

OR

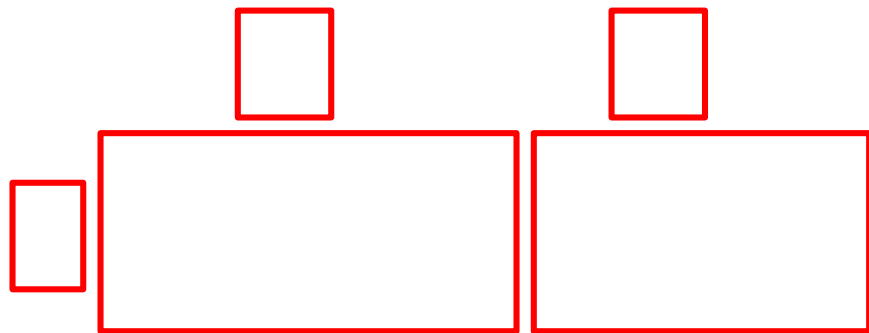
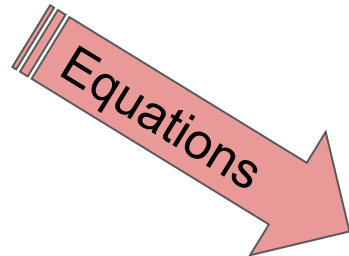


Can anyone  
explain the  
associative  
property?

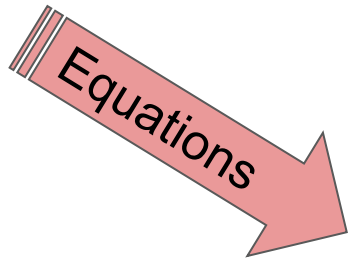
## The Associative Property Part 2



4.  $6 \times 19$



6. 6x90



## Problems and Investigations-Fractions on a Ruler



1 foot = 12 inches

Measure 1 strip and label it  
How could we divide this strip in half?



$$1 \text{ foot} = 12 \text{ inches}$$

$$\frac{1}{2} \text{ foot} = 6 \text{ inches} \quad \frac{1}{2} \text{ foot} = 6 \text{ inches}$$

Draw a line in the middle of  
your second strip and label.  
How could we divide it into 3  
equal parts?



Don't cut  
them  
apart!



1 foot = 12 inches

$\frac{1}{3}$  foot = 4 inches

$\frac{1}{3}$  foot = 4 inches

$\frac{1}{3}$  foot = 4 inches

Label your strip in thirds.  
How can we divide it into 4 equal  
parts?



1 foot = 12 inches

$$\frac{1}{4} \text{ ft.} = 3 \text{ in.}$$

$$\frac{1}{4} \text{ ft.} = 3 \text{ in.}$$

$$\frac{1}{4} \text{ ft.} = 3 \text{ in.}$$

$$\frac{1}{4} \text{ ft.} = 3 \text{ in.}$$

Label your strip in 4 equal parts. How can you divide it into 6 equal parts?



1 foot = 12 inches

$$\frac{1}{6} \text{ ft} = 2 \text{ in}$$

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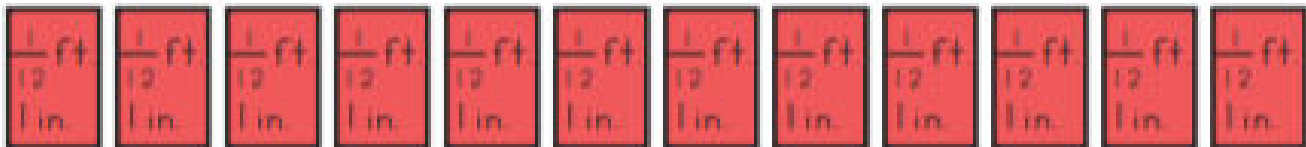
$$\frac{1}{6} \text{ ft} = 2 \text{ in}$$

Label your strip in 6 equal parts. How can you divide it into 12 equal parts?





1 foot = 12 inches



Label your last strip

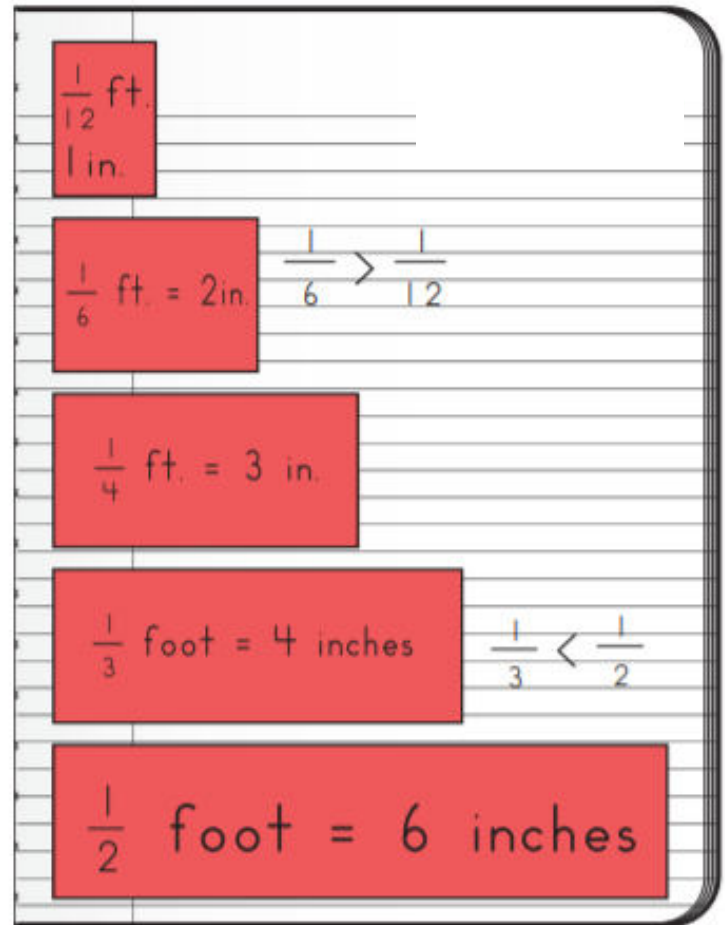
## In your journal

Write the Date

And the Title: **Fractions on a number line**

Let's order 1 of each fraction piece from least to greatest

What observations can you make about the relationships between the pieces?



# *Work Places*

5C Line 'Em Up

5D Division Capture

6A Tangram Polygons

6B Geoboard Polygons

6C Guess My Quadrilateral

6D Area or Perimeter

# *Daily Practice*

SB 237- Sixty Seconds in a Minute

# *Home Connection*

HC 131-132- Hours to Minutes