Unit 4 Module 3 Session 5

Problems & Investigations-Fractions on the Number Line

Getting Ready-

- SB 134-135-Number Line Sketches
- Class number line (from Session 4)
- Additional number cards (see Preparation)
- Students' double number lines and paperclips (from Session 4)

Vocabulary

Distance

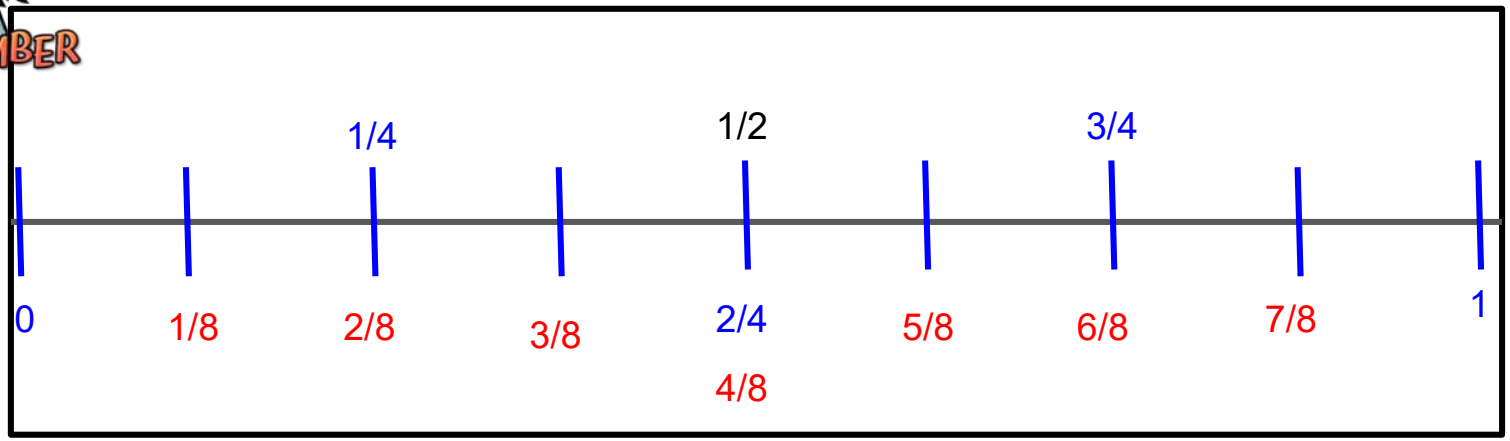
Eighth

Fourth

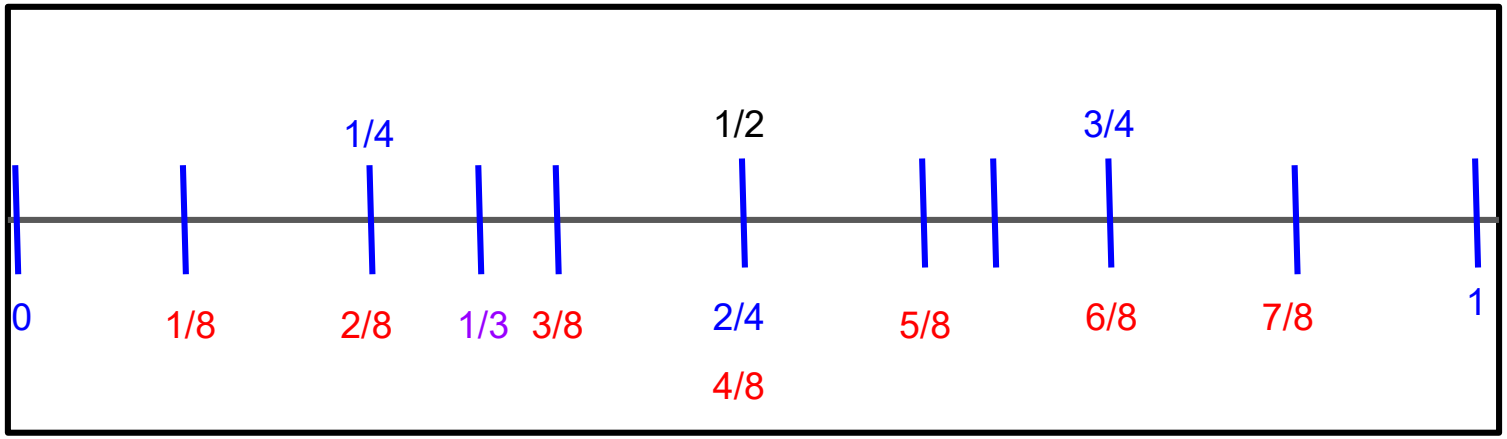
Fraction

Half

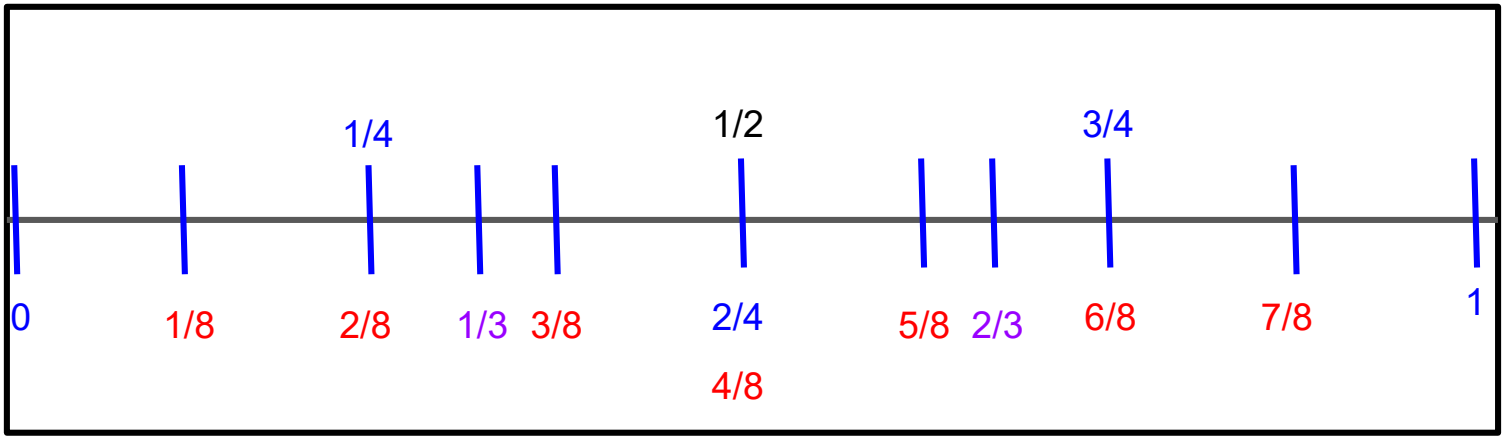
- Locate fractions on a number line, and place them in their correct positions on a number line
- Show a unit fraction on a number line
- Compare two fractions with the same numerator; use the symbols >, =, and <
- Explain why one fraction must be greater than or less than another fraction



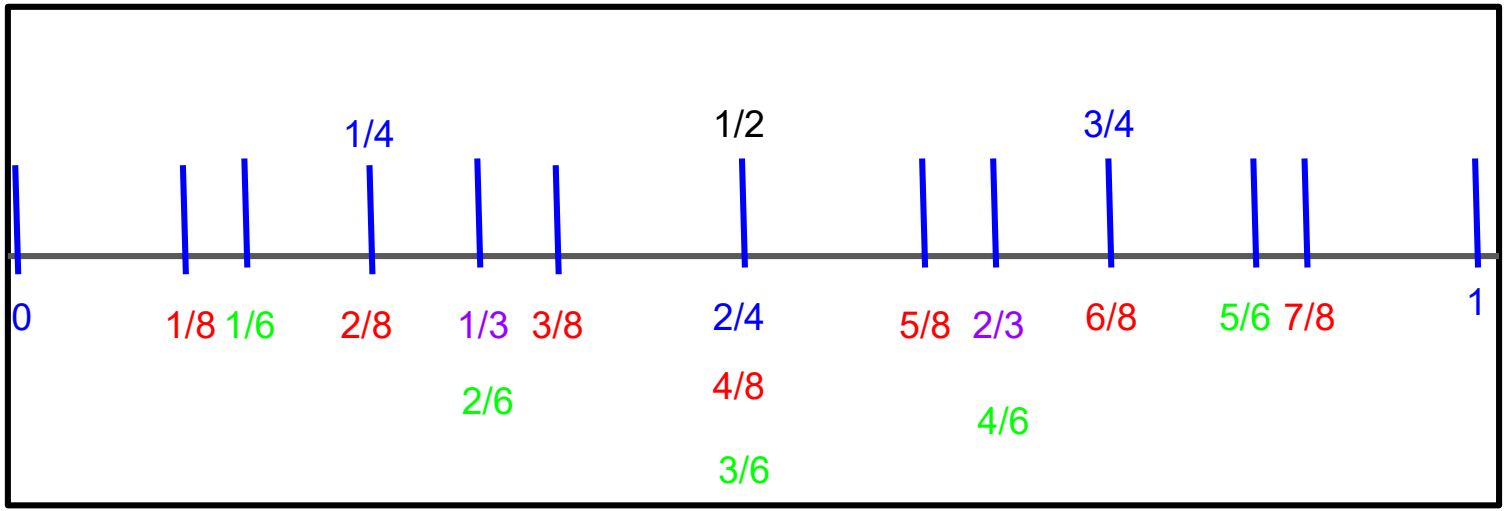
Now let's add ⅓. How many equal parts will we need?



Try 2/3



Now try ⅙. How many equal parts will you need?



- What equivalent fractions can you see?
- Explain how you could move your paper clip to the correct fraction without looking?

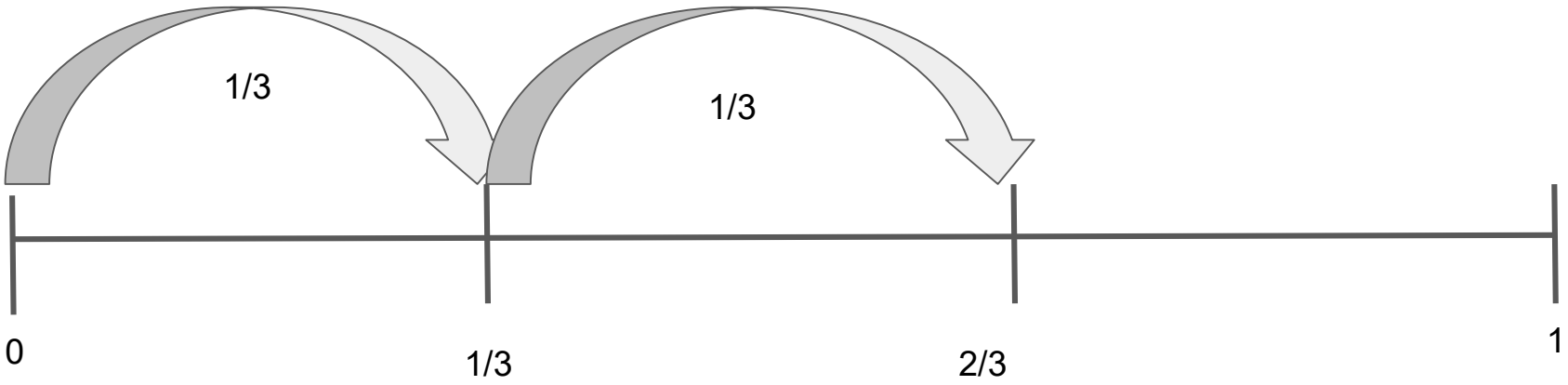
WORKBOOK PAGE
124 PLEASE

Number Line Sketches page 1 of 2

1 Use your double number line to model the word problems below. Then sketch your solution on the number line. Write an equation to explain your thinking.

a Today you jogged $\frac{1}{3}$ of a mile before stopping to chat for a moment with your friend. Then you continued to jog another $\frac{1}{3}$ of a mile before stopping for a drink of water. How far did you jog in all?

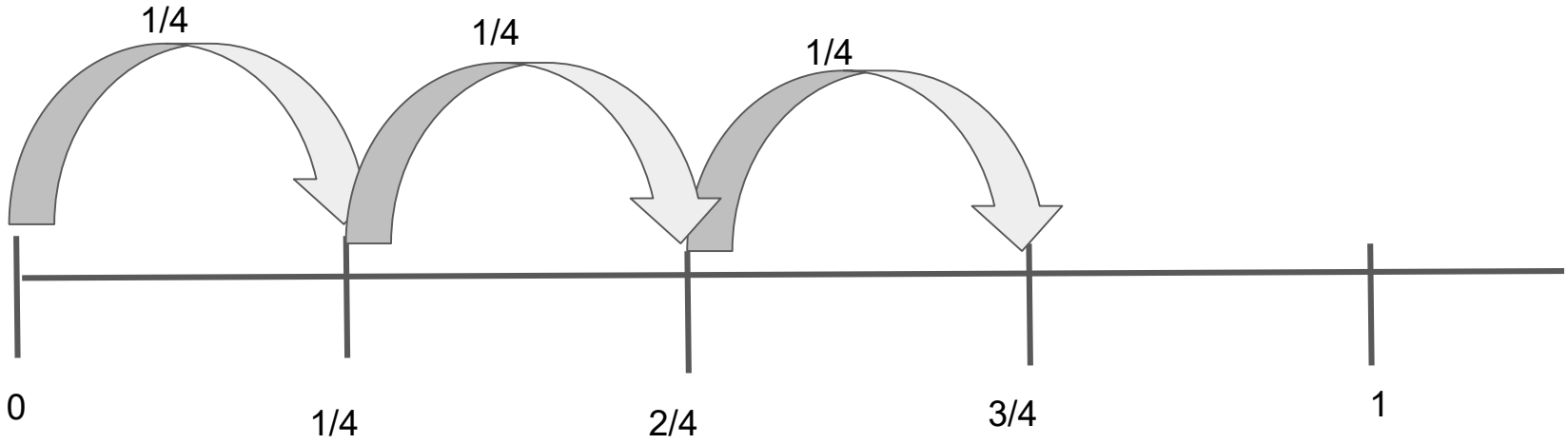
Move your paper clip to where you would stop for a drink of water. Jump from ⅓ to ⅔, place ⅔ on the number line, write ⅓ +⅓ = ⅔ for number 1a.



$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$

b During P.E., teams of 3 people run a relay. Each person runs $\frac{1}{4}$ of the way around the track. Where does the race end?

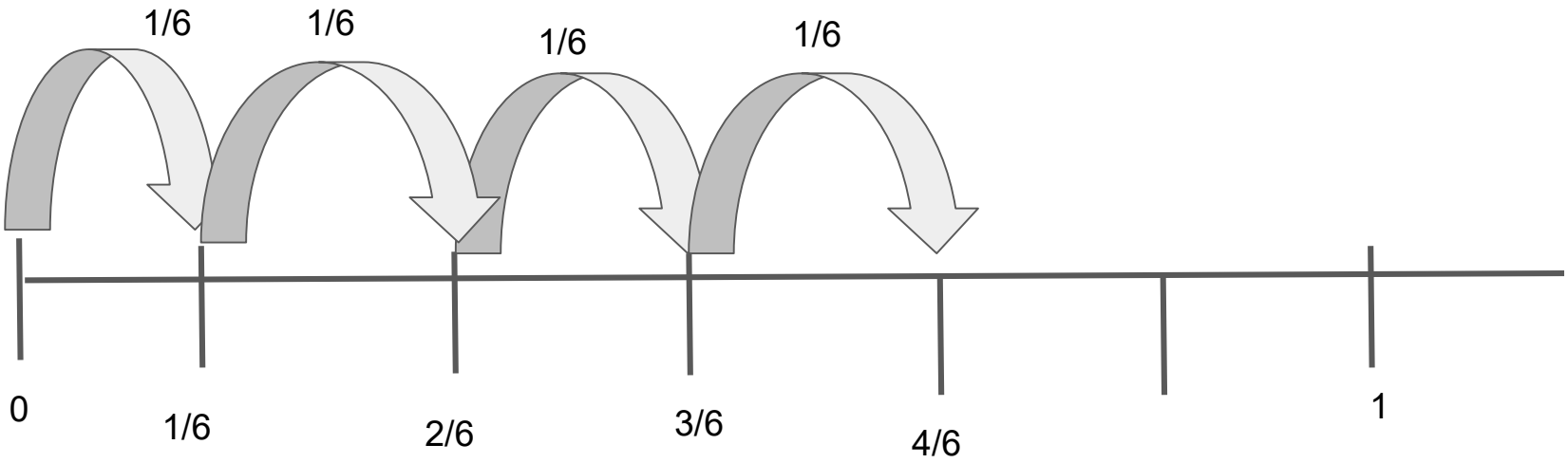
How many equal parts do we need?



$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 3/4$

c My mom bought a long length of ribbon to make bows for my sister and me. We each get $\frac{2}{6}$ of the ribbon. How much of the total ribbon is used?

How many equal parts will you need?

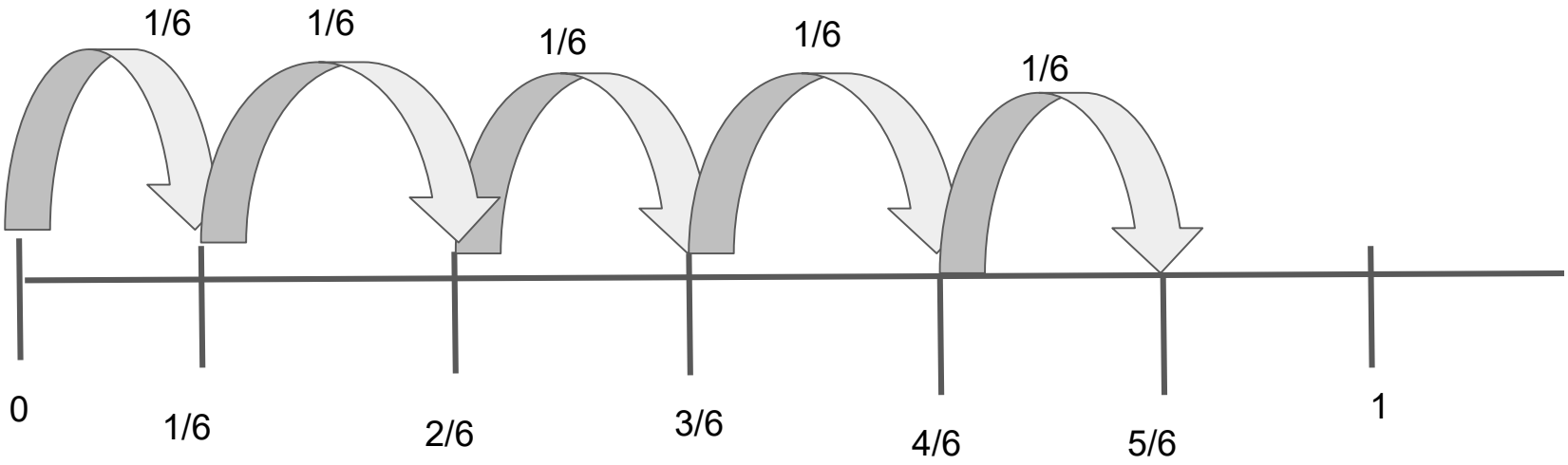


$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = 4/6$

Number Line Sketches page 2 of 2

d On the ranch, fences are located every $\frac{1}{6}$ of a mile. If I stop at the fifth fence, how much of a mile did I travel?

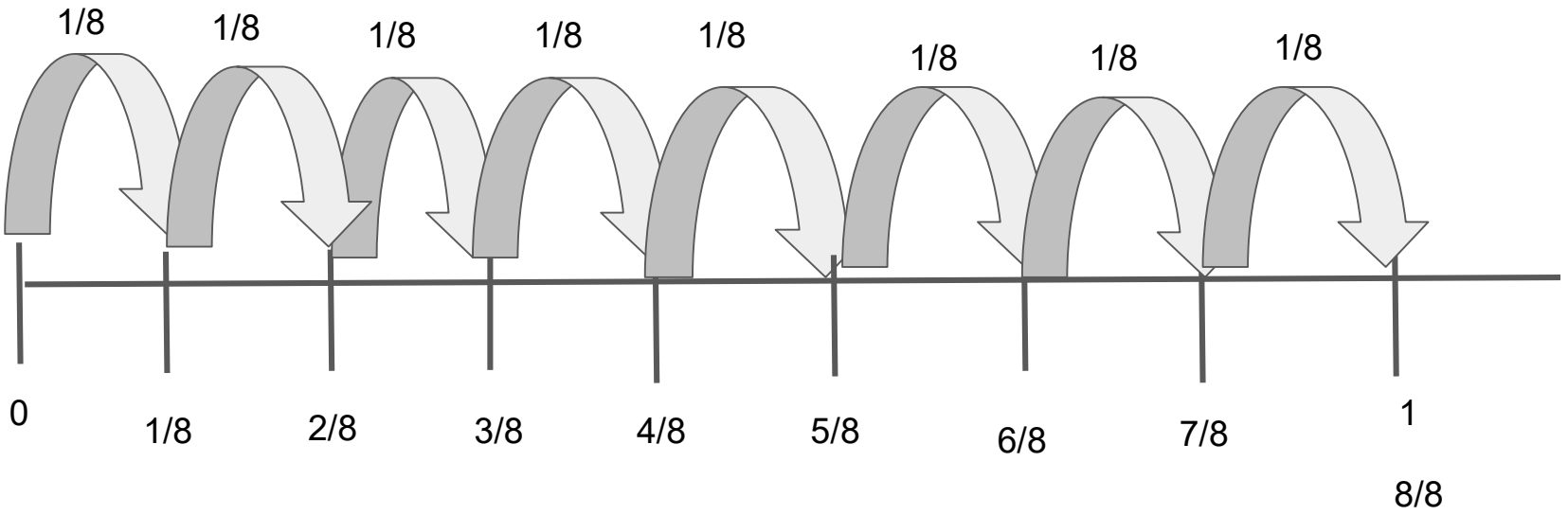
How many equal parts will you need?



$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} =$ 5/6

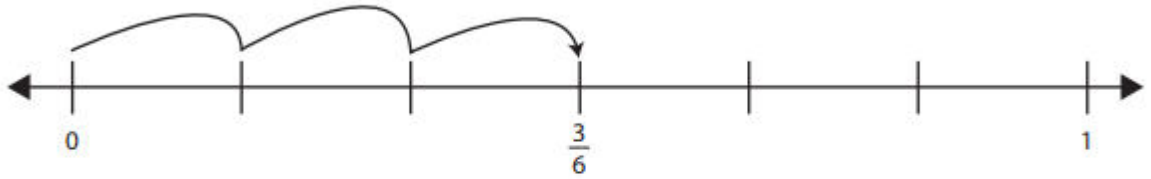
e In our city, drinking fountains are located every $\frac{1}{8}$ of a mile. If I go a mile, stopping at every fountain, how many times will I stop?

How many equal parts will you need?



$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = 8/8 = 1$

2 I'm walking my dog $\frac{3}{6}$ of the way to the park this morning. Another fraction name for $\frac{3}{6}$ is _____.



3 **CHALLENGE** Write your own fraction word problem below using a number line to model your answer. Write an equation to show your computation.

Work Places

3C Round Ball Hundreds

3D Round & Add Hundreds

4A Tic-Tac-Tock

4B Measurement Scavenger Hunt

4C Target One Thousand

4D Hexagon Spin & Fill

Daily Practice

SB 136 The Broken Ruler, Part 2

Home Connection

HC 75-76 Fractions, Fractions & Fractions