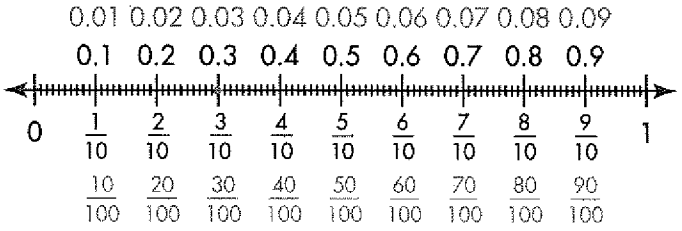
Name _____

Homework 10-4
Number Lines and Equivalent Fractions

Another Look!

Write two equivalent fractions that name the point shown on the number line.

Label the same number line in two different ways.



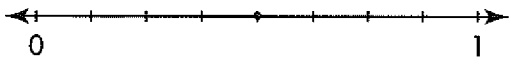
Equivalent fractions are the same distance from 0 on a number line and represent the same fractional amounts.

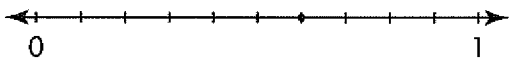
The point is at $\frac{3}{10}$ and $\frac{30}{100}$.

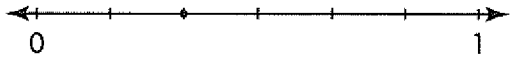
$\frac{3}{10} = \frac{30}{100}$

$\frac{3}{10}$ and $\frac{30}{100}$ are equivalent fractions.

In **1** through **4**, write two fractions that name the point on the number line.

1. 

2. 

3. 

4. 

5. Are $\frac{3}{8}$ and $\frac{3}{4}$ equivalent fractions? Use a number line to decide.

6. Draw a number line to show that $\frac{1}{4}$ and $\frac{4}{16}$ are equivalent.

7. Number Sense Which of the following pairs are **NOT** equivalent fractions?

A $\frac{1}{3}, \frac{5}{8}$

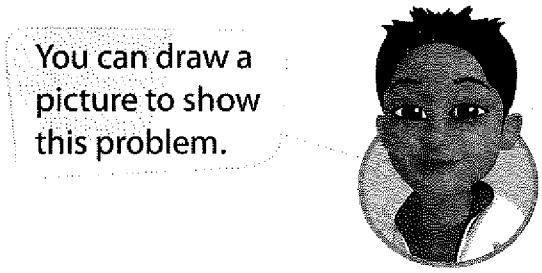
B $\frac{2}{4}, \frac{4}{8}$

C $\frac{3}{5}, \frac{6}{10}$

D $\frac{3}{4}, \frac{9}{12}$

8. Connect There are 267 students and 21 adults going on a school trip. An equal number of people will ride on each bus. If there are 9 buses, how many people will ride on each bus?

9. On a number line, point *X* is located at $\frac{2}{3}$. On a second number line, point *Y* is the same distance from 0 as point *X*, but has a numerator of 8. What is the denominator of point *Y*?



10. Extend Your Thinking A recipe calls for $\frac{1}{4}$ cup of flour. Carter does not have a quarter-cup measuring cup, though he has a measuring cup that holds an eighth of a cup. How can Carter measure the flour he needs for his recipe?

11. Tools Albert hikes for 0.35 mile. Use a number line to write 0.35 as a fraction. Then find an equivalent fraction.

12. Mike says that he can find an equivalent fraction to $\frac{1}{11}$, even though $\frac{1}{11}$ is in simplest form. Is Mike correct? Explain.

13. Math and Science Ocean high tides occur twice each day. The pull of gravity from both the Sun and the Moon affect ocean tides. Because the Sun is much farther away, its effect on tides is only about $\frac{4}{10}$ that of the Moon. Write $\frac{4}{10}$ in simplest form.