Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

We have been exploring equivalent fractions with fraction strips and pattern blocks. Today we will use a number line as a tool for exploring equivalent fractions.

1)

 0 1



 0 1

1. Label the top number line.
2. Label the bottom number line.

c. What do you notice about the relationship between  and?

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1. Based on this number line, what fraction is equivalent to $\frac{4}{6}$ ? \_\_\_\_\_\_\_\_

 How do you know this?

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1. Which fraction is larger (has a greater value), or ? Explain using the number line.

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2)

 0 1

1. Divide the interval from 0 to 1 on the number line above into **fourths**. Put an X on the line where is located.
2. Now divide the interval from 0 to 1 on the same number line into **eighths**. Label the appropriate marks with the numbers,, etc. (Hint: If you are unsure about this use your fourths and eighths fraction strips to help you.)

c. Based on your number line, what fraction is equivalent to ? How do you know?

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 d. Which fraction is larger (has a greater value), or ? Explain using the number line.

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 3) Give two equivalent fractions that are located where the X is.

 X

 a.

 0 1

**Challenge:** If the number line in problem 2 was divided into 16ths, what fraction with 16 as the denominator would be located between $\frac{1}{8}$ and $\frac{2}{8}$ ? Explain why.

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