## Lesson 4: Same Size, Related Sizes

* Let’s find some fractions that are the same size.

### Warm-up: Notice and Wonder: A Fraction Strip and a Number Line

What do you notice? What do you wonder?



### 4.1: Same Size, Different Numbers

Here’s a diagram of fraction strips, with two strips added for tenths and twelfths.



1. Use a blank strip to show tenths. Label the parts. How did you partition the strip?
2. Use a blank strip to show twelfths. Label the parts. How did you partition the strip?
3. Jada says, “I noticed that one part of $\frac{1}{2}$ is the same size as two parts of $\frac{1}{4}$ and three parts of $\frac{1}{6}$. So $\frac{1}{2}$, $\frac{2}{4}$, and $\frac{3}{6}$ must be **equivalent**.”
* Find a fraction that is equivalent to each of the following fractions. Be prepared to explain your reasoning.
	1. $\frac{1}{6}$
	2. $\frac{2}{10}$
	3. $\frac{3}{3}$

### 4.2: Fractions on Number Lines

1. Here are some number lines. The point on this number line shows the fraction $\frac{1}{2}$.
* 
* Label the tick marks on each number line.
* 
* 
* 
1. Suppose you are to locate $\frac{1}{6}$, $\frac{1}{8}$, and $\frac{1}{10}$ on one of the number lines.
	1. Which number line would you use for each fraction? Be prepared to explain your reasoning.
	2. Locate and label each fraction ($\frac{1}{6}$, $\frac{1}{8}$, and $\frac{1}{10}$) on a different number line.
2. Locate and label each of the following fractions on one of the number lines.
* $\frac{2}{3}$
* $\frac{2}{8}$
* $\frac{2}{5}$
* $\frac{3}{5}$
* $\frac{4}{6}$
* $\frac{4}{8}$
* $\frac{4}{10}$
* $\frac{6}{6}$
* $\frac{6}{10}$
* $\frac{8}{8}$



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