4.NF.1

MY Homework

Lesson 3

Hands On: Model **Equivalent Fractions**

Homework Helper



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Determine whether $\frac{1}{2}$ is equivalent to $\frac{3}{6}$.

One Way Use fraction tiles.



Model $\frac{1}{2}$.



2 Model $\frac{3}{6}$.

Line up three $\frac{1}{6}$ -fraction tiles below the $\frac{1}{2}$ -fraction tile.

$$\begin{array}{c|c} \frac{1}{6} & \frac{1}{6} & \frac{1}{6} \end{array}$$

It takes three $\frac{1}{6}$ -tiles, so the fraction is $\frac{3}{6}$.

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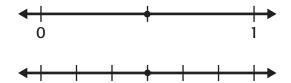
Since they are the same length, the fractions are equivalent.

So,
$$\frac{1}{2} = \frac{3}{6}$$
.

Another Way Use number lines.



Divide the first number line into halves.



Divide the second number line into sixths.

Count the number of sixths that are in one half.

The number lines show that $\frac{1}{2}$ and $\frac{3}{6}$ are at the same point.

So, they are equivalent fractions.

Practice

Recognize whether the fractions are equivalent. Write yes or no. Use fraction tiles or number lines.

1.
$$\frac{3}{5}$$
 and $\frac{6}{8}$

2.
$$\frac{4}{5}$$
 and $\frac{5}{6}$

3.
$$\frac{2}{4}$$
 and $\frac{6}{12}$

4.
$$\frac{2}{3}$$
 and $\frac{4}{6}$

5.
$$\frac{8}{12}$$
 and $\frac{4}{6}$

6.
$$\frac{5}{6}$$
 and $\frac{9}{10}$

Generate two equivalent fractions for each fraction. Use fraction tiles or number lines.

7.
$$\frac{1}{3}$$

8.
$$\frac{8}{12}$$

9.
$$\frac{3}{4}$$



10. PRACTICE Justify Conclusions Francie lives $\frac{1}{5}$ mile from the school. Jake lives $\frac{2}{10}$ mile from the school. Do they live the same distance from the school? Explain.

Vocabulary Check



Draw a line to match the vocabulary term with its example.

11. numerator

• $\frac{6}{10}$ and $\frac{3}{5}$

12. denominator

• the number 1 in $\frac{1}{4}$

13. equivalent fractions

• the number 4 in $\frac{1}{4}$