Find Equivalent Fractions

Name: _____

Prerequisite: Identify Equivalent Fractions

Study the example showing how to decide if two fractions are equivalent. Then solve problems 1–7.

Example

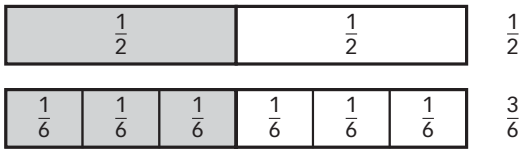
The bars are the same size.

The parts are different sizes.

The same amount is shaded on each bar.

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

$\frac{1}{2}$ and $\frac{3}{6}$ are equivalent fractions.



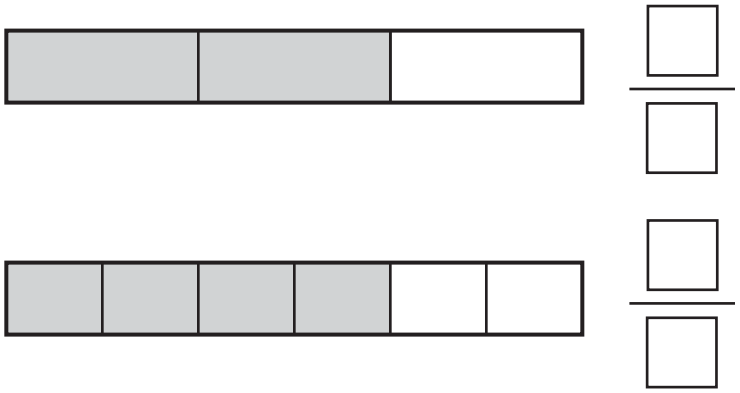
Shade the bars to show the equivalent fractions.

1

2

Write the equivalent fractions these bars show.

3



Vocabulary

equivalent fractions
fractions that name the same number.
$\frac{1}{2}$ and $\frac{2}{4}$ are equivalent.

Shade to show the fractions. Are the two fractions equivalent? Choose *Yes* or *No*.

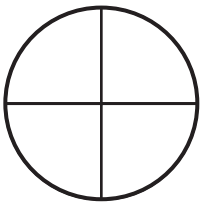
4

$\frac{1}{2}$

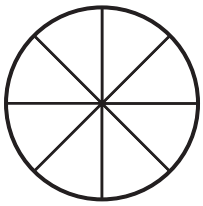
$\frac{1}{3}$

☐ Yes ☐ No

5



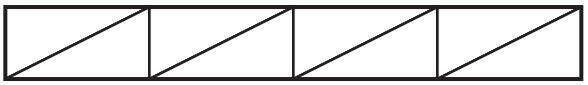
$\frac{3}{4}$



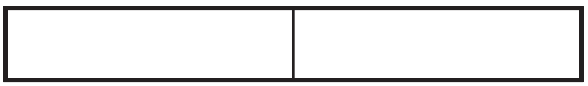
$\frac{6}{8}$

☐ Yes ☐ No

6



$\frac{4}{8}$



$\frac{1}{2}$

☐ Yes ☐ No

7 Use the bars to show that $\frac{2}{3}$ is **not** equivalent to $\frac{7}{8}$.

Explain how your drawing shows that $\frac{2}{3}$ and $\frac{7}{8}$ are not equivalent.

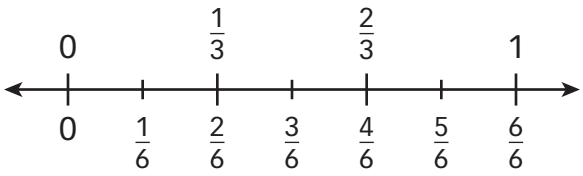
Name: _____

Find Equivalent Fractions

Study the example showing how to find equivalent fractions. Then solve problems 1–8.

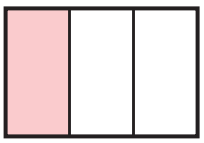
Example

Maria colored $\frac{1}{3}$ of her art paper red. Erica colored $\frac{2}{6}$ of her art paper yellow. Did the two girls color the same amount of their art papers?

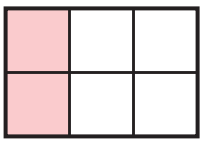


One third is equal to *two sixths*.

$$\frac{1}{3} = \frac{2}{6}$$



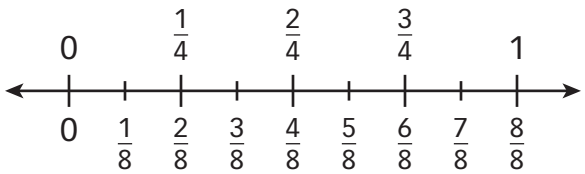
Maria colored $\frac{1}{3}$



Erica colored $\frac{2}{6}$

Both girls colored the same amount of their art papers.

Use the number line to complete the equivalent fractions.



1 $\frac{1}{4} = \frac{\square}{8}$

2 $\frac{6}{8} = \frac{\square}{4}$

3 $\frac{2}{4} = \frac{\square}{\square}$

Vocabulary

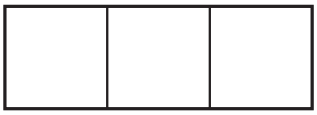
equivalent fractions fractions that name the same number. $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent.

Shade the bars to show equivalent fractions. Then fill in the blanks to write equivalent fractions.

4

$\frac{1}{2}$ = $\frac{\square}{8}$

5



$\frac{2}{3}$ = $\frac{\square}{6}$

Draw lines and shade to show equivalent fractions. Then fill in the blanks to write equivalent fractions.

6

$\frac{1}{2}$ = $\frac{\square}{4}$

7

$\frac{4}{6}$ = $\frac{\square}{3}$

8 What is a fraction equivalent to $\frac{4}{4}$? Explain how you know.

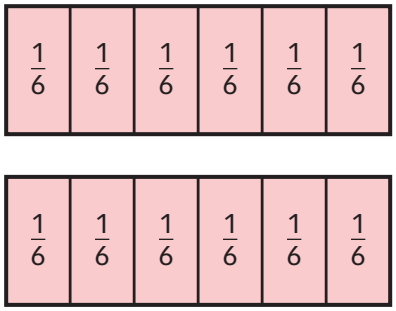
Name: _____

Write a Whole Number as a Fraction

Study the example showing different ways to write whole numbers as fractions. Then solve problems 1–13.

Example

Mrs. Clark cut 2 same-size pieces of colored paper into *sixths* to make strips for paper chains. How many strips did she make?



$$1 \text{ whole} = \text{six } \frac{1}{6}s$$

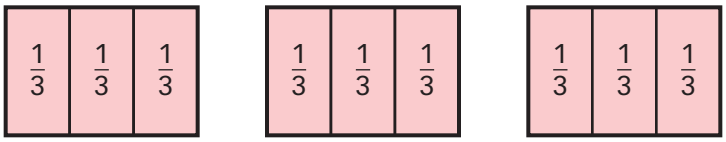
$$1 = \frac{6}{6}$$

$$2 \text{ wholes} = \text{twelve } \frac{1}{6}s$$

$$2 = \frac{12}{6}$$

Mrs. Clark made 12 strips. Each strip is $\frac{1}{6}$ of a whole piece of paper.

Write the whole numbers as fractions.



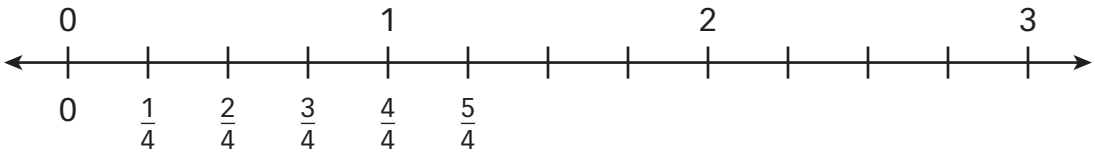
1 $1 = \frac{\square}{3}$

2 $2 = \frac{\square}{3}$

3 $3 = \frac{\square}{3}$

4 $4 = \frac{\square}{3}$

Use this number line to answer problems 5–8.



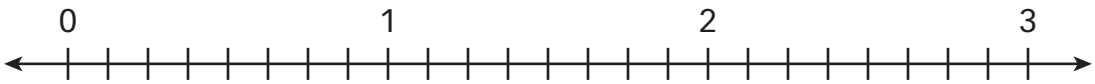
5 $1 = \frac{\square}{4}$

6 $2 = \frac{\square}{4}$

7 $3 = \frac{\square}{4}$

8 $0 = \frac{\square}{4}$

Use this number line to answer problems 9–11.



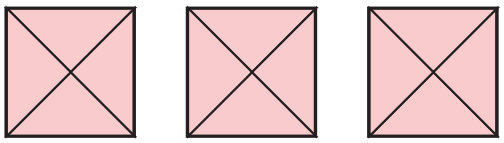
9 One whole is equal to _____ eighths.

10 16 eighths is equal to _____ wholes.

11 $3 = \frac{\square}{8}$

12 Use the model below to write a fraction equivalent to 3.

$3 =$ _____



13 Draw a model to show $2 = \frac{8}{4}$.

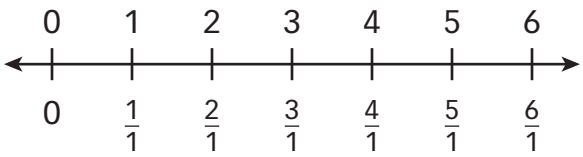
Name: _____

Write a Whole Number as a Fraction with a Denominator of 1

Study the example showing different ways to write a whole number as a fraction with a denominator of 1. Then solve problems 1–14.

Example

The spaces between whole numbers on this number line are not divided into smaller parts. So, each whole has only 1 part.



The number line shows that $\frac{3}{1}$ is equal to 3.

$\frac{3}{1}$ is a fraction name for 3.

Write the whole number for each fraction.

1 $\frac{4}{1} =$ _____

2 $\frac{2}{1} =$ _____

3 $\frac{5}{1} =$ _____

4 $\frac{8}{1} =$ _____

Write the fraction for each whole number.

5 $2 =$ _____

6 $5 =$ _____

7 $1 =$ _____

8 $7 =$ _____

Write the whole number for each fraction.

9 $\frac{9}{1} =$ _____

M 10 $\frac{10}{1} =$ _____

Write the fraction for each whole number.

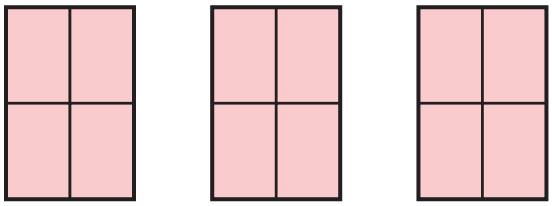
11 $12 =$ _____

M 12 $18 =$ _____

13 Explain how to write a whole number as a fraction with a denominator of 1.

14 Bella says this model shows 3 wholes. She says it shows that if you write the whole number 3 as a fraction, you have to write $3 = \frac{12}{4}$.

How can you explain to Bella that there are other ways to write 3 as a fraction?



Vocabulary

numerator the number above the line in a fraction; it tells how many equal parts are described.

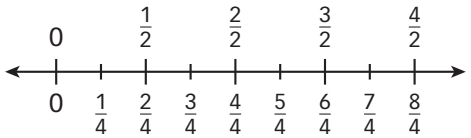
denominator the number below the line in a fraction; it tells how many equal parts are in the whole.

Name: _____

Find Equivalent Fractions

Solve the problems.

1 Use the number line.



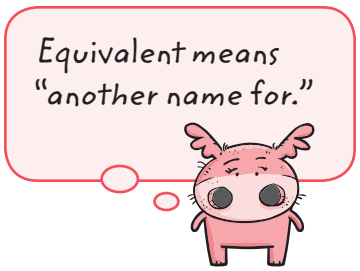
Which fraction is equivalent to $\frac{6}{4}$?

A $\frac{2}{3}$

B $\frac{4}{6}$

C $\frac{3}{2}$

D 2



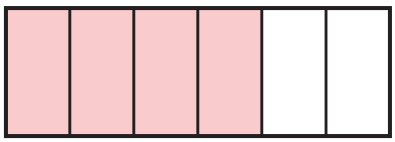
2 Mrs. White is painting the fence in her yard. After painting $\frac{4}{6}$ of the fence she stops for lunch. Which fraction is equivalent to $\frac{4}{6}$?

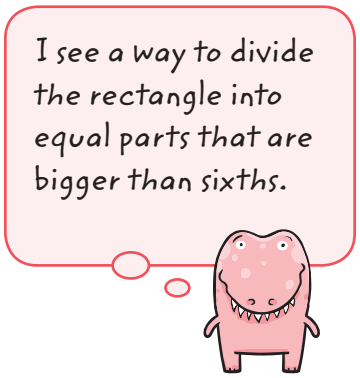
A $\frac{1}{3}$

B $\frac{3}{2}$

C $\frac{2}{6}$

D $\frac{2}{3}$





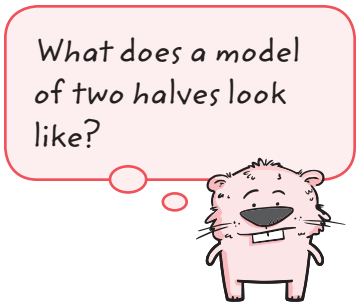
3 Draw a model to show that $3 = \frac{6}{2}$.

Explain your drawing.

_____

_____

_____



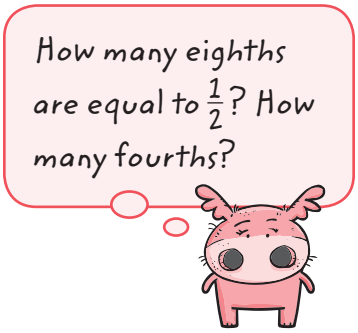
Solve.

4 Jeff's pizza is cut into 8 equal pieces. He eats $\frac{1}{2}$ of it. What fraction of the pizza does he eat?

A $\frac{2}{8}$ **C** $\frac{4}{8}$

B $\frac{8}{8}$ **D** $\frac{3}{8}$

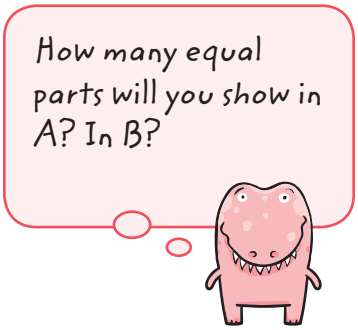
Samantha chose **A** as the correct answer. How did she get that answer?



5 Draw lines and shade rectangles *A* and *B* to show that $\frac{1}{4} = \frac{2}{8}$.

A ***B***

Explain your work.



6 Which statements are true? Circle the letter of all that apply.

A $\frac{4}{2} = 2$ **D** $\frac{2}{4} = \frac{1}{2}$

B $\frac{4}{1} = 4$ **E** $\frac{1}{2} = \frac{2}{1}$

C $\frac{1}{3} = 3$