

# Equivalent Fractions



- How would I use fractions to describe the whole chocolate bar?



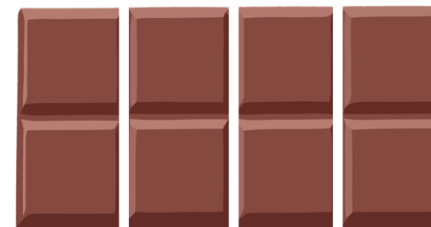
It would be nice to share the chocolate bar!

- How would I choose to show two fair shares of this chocolate bar?
- How do I know I've made a fair share?
- How would I explain and write each fair share as a fraction of the whole amount?

This time I'll share the whole chocolate bar with more friends.



- How would I use fractions to illustrate how I'm sharing the whole amount?



The fractions  $\frac{1}{4}$  and  $\frac{2}{8}$  are equivalent fractions.

- How would I explain equivalent fractions?

$$\frac{1}{4} = \frac{2}{8}$$

I can use multiplication and division to illustrate how two fractions are equivalent.

- How would I demonstrate using multiplication to explain  $\frac{1}{4} = \frac{2}{8}$ ?

$$\frac{1}{4} = \frac{2}{8}$$

- How would I demonstrate using division to explain  $\frac{1}{4} = \frac{2}{8}$ ?

$$\frac{1}{4} = \frac{2}{8}$$



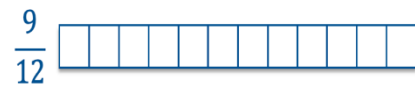
A student used diagrams to illustrate the fractions  $\frac{3}{4}$  and  $\frac{9}{12}$  are equivalent fractions.

The student began by drawing two equal sized rectangles.



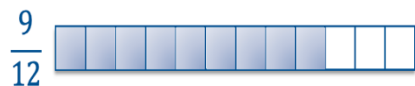
- What do the rectangles represent?
- Why do the rectangles need to be the same size?

Next, the student divides each rectangle into equal parts.



- Why does the student perform this step?
- How does the student determine how many equal parts in each rectangle?

The last step involves shading some of the equal parts in each rectangle.



- How does the student determine how much of each rectangle to shade?
- How do the diagrams illustrate the fractions  $\frac{3}{4}$  and  $\frac{9}{12}$  are equivalent?



- How would I demonstrate using multiplication to explain  $\frac{3}{4} = \frac{9}{12}$ ?

$$\frac{3}{4} = \frac{9}{12}$$

- How would I demonstrate using division to explain  $\frac{3}{4} = \frac{9}{12}$ ?

$$\frac{3}{4} = \frac{9}{12}$$

## Equivalent Fractions

Which statements do I feel confident explaining and demonstrating?

Which statements do I not feel confident explaining and demonstrating?

- ✓ I can explain when two fractions are equivalent fractions
- ✓ I can illustrate how two fractions are equivalent using diagrams
- ✓ I can demonstrate how I use multiplication to write equivalent fractions
- ✓ I can demonstrate how I use division to write equivalent fractions