



When students see and work with equivalent fractions using different models, they develop a deeper understanding of the concept.

This falls in line with Common Core.

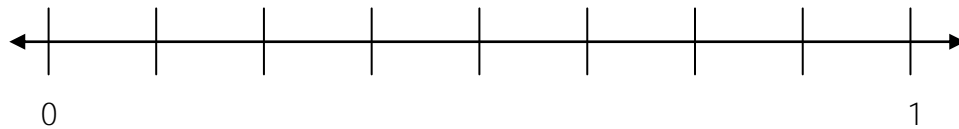
Example: Grade 3 SBAC Practice Test (2013)

Drag each fraction to the correct location on the number line.

$$\frac{1}{2}$$

$$\frac{1}{4}$$

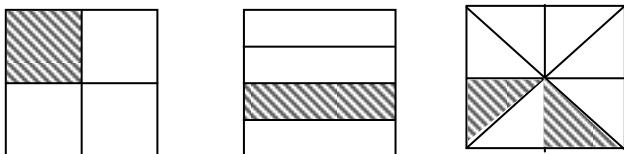
$$\frac{1}{8}$$



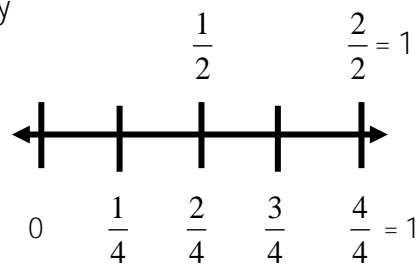
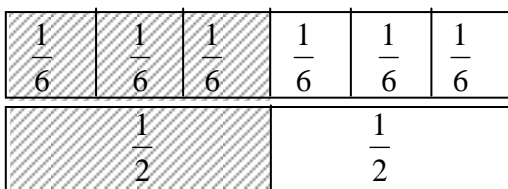
Example: Some images reproduced from  
by The Common Core Standards Writing Team Sept, 2013

(Grade 3)

Some Area Representations of  $\frac{1}{4}$ : (There are more in the Progressions documents.)



Number Line and Fraction Strips to Show Equivalency







Draw a line under your work or go to the next page to work with something new. What if we cut, or partitioned, the pizzas into sixths?

How many sixths would be the same as 1 half? (3) Why 3? (3 is half of 6)

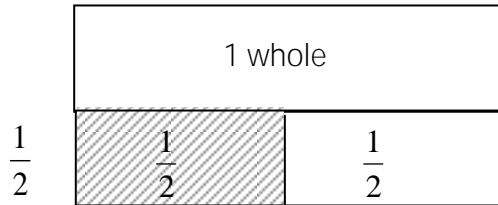
What are different ways to make  $\frac{1}{2}$  in the box?

Thumbs up if you can come up with your own ways of shading 3 sixths. Have students make and share drawings. Possible student drawings:

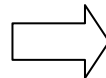
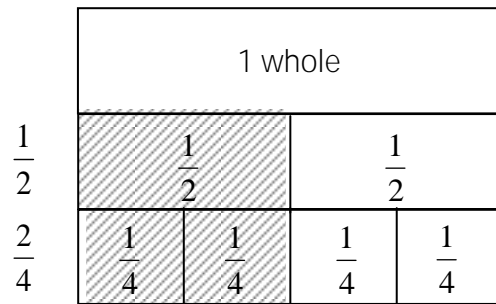
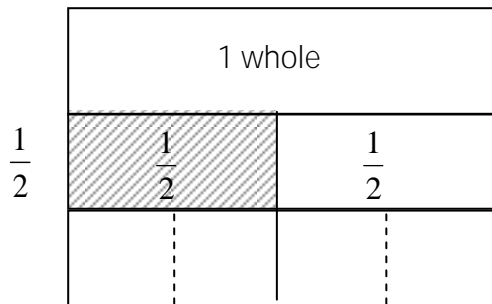
*Equivalent fractions*



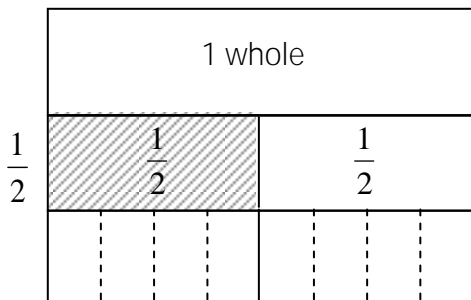
Today we are going to do a bar model and number line to match what we did in the fraction tiles. (Students can have fraction tiles with them, or you can have a list that was made the previous day showing what students discovered using the fraction tiles.)



Do we all agree that 1 half equals 2 fourths? Let's see. Then make (partition into) 2 halves and shade in 1 half.



How many eighths in 1 half?  $\frac{1}{2} = \frac{?}{8}$  Our list says 4 eighths. Let's see.



Start with 1 whole and 1 half, just like before. Extend the halves down. Divide, or partition, each half into fourths, and then eighths.

Label and shade in eighths until you get to 1 half.







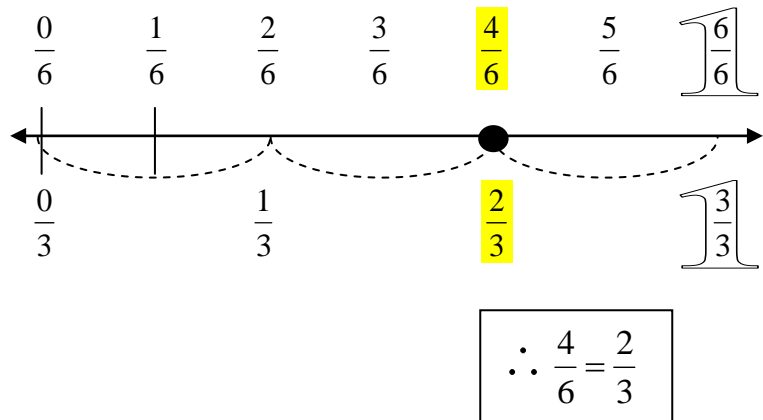




How many eighths are in 1 half?  $\frac{1}{2} = \frac{?}{8}$



How many thirds are in 4 sixths?  $\frac{4}{6} = \frac{?}{3}$



How many fourths are in 2 eighths?  $\frac{2}{8} = \frac{?}{4}$

Include the fraction pairs used in previous lessons. You can have them do both bar model and number line or just number line.

---

How many halves are in 3 thirds?  $\frac{3}{3} = \frac{?}{2}$  Draw a bar model.

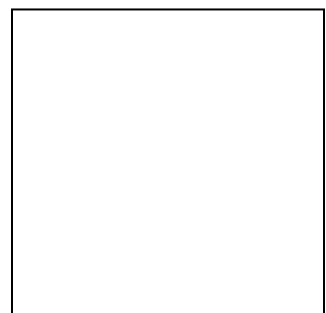
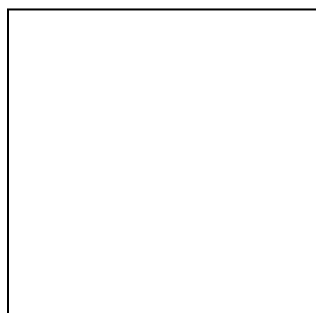
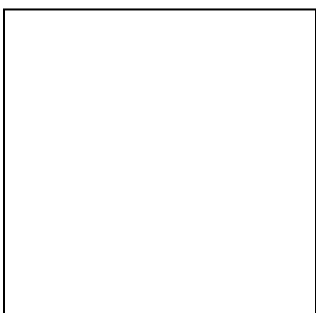
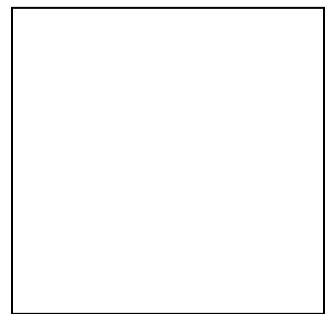
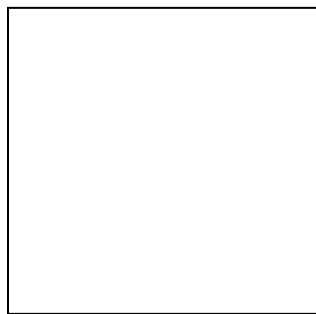
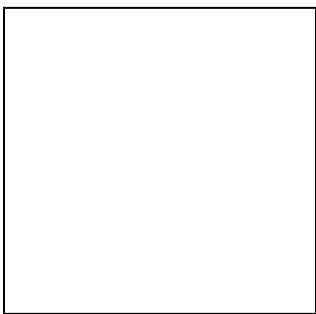
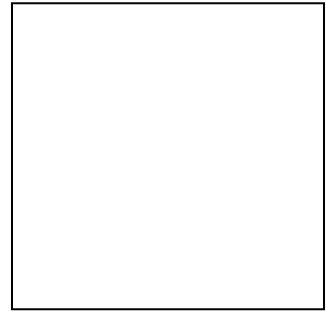
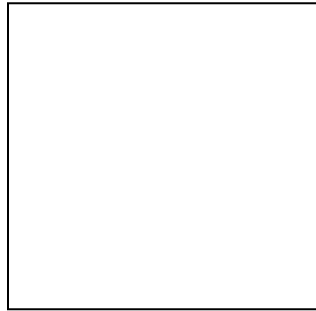
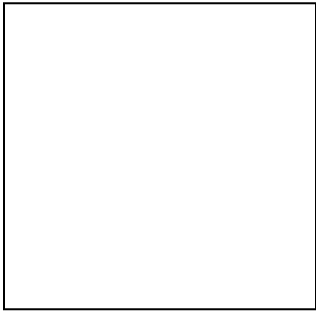
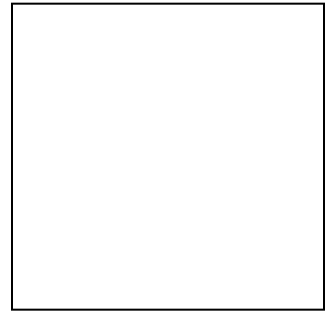
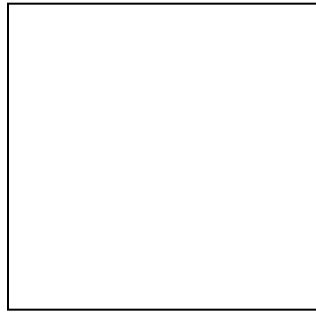
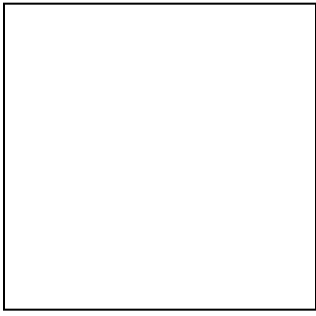
This example draws on their understanding of 1 whole and is more challenging to draw.

Students can draw the bar model or a different model. They can also explain.

What is the same? What is different? Which models are most alike?









$$\frac{1}{2}$$



decomposition.  
dition.

