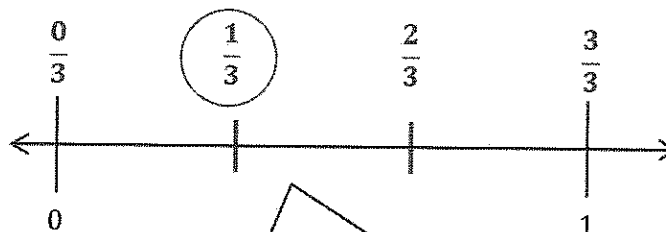


## G3-M5-Lesson 18

Place the two fractions on the number line. Circle the fraction with the distance closest to 0. Then, compare using  $>$ ,  $<$ , or  $=$ .

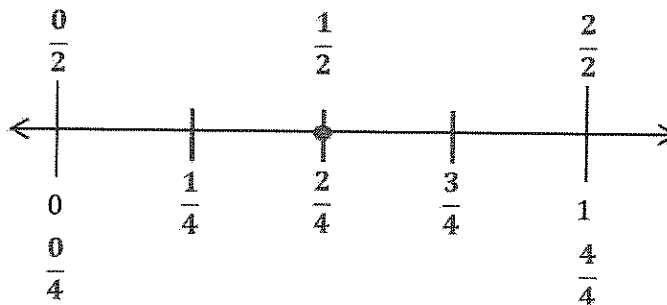
1.  $\frac{2}{3} > \frac{1}{3}$



Both fractions are thirds, so I need to partition my number line into thirds. Then, I can count and label the 2 fractions on the number line and circle the fraction with the distance closest to 0.

I can think of the number line like a giant ruler. When I use a ruler, I start at 0 to measure. Then, I can compare the measurements. It's the same when comparing fractions. The fraction's distance from 0 helps me to compare. 1 third is a shorter distance from 0, so it is the smaller fraction. 2 thirds is a greater distance away from 0, so it is the larger fraction.

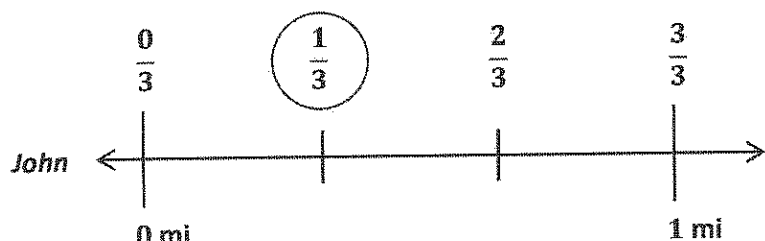
2.  $\frac{1}{2} = \frac{2}{4}$



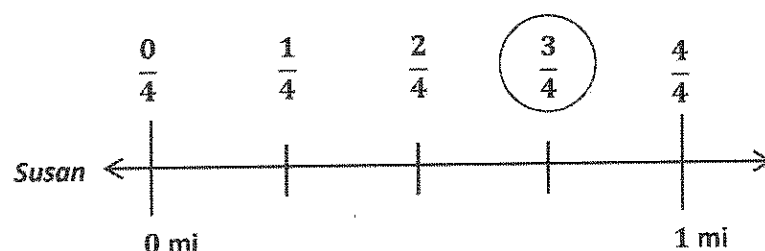
These fractions have different numbers on the bottom. I'll count and label halves above my number line and fourths below.

I know these are equivalent fractions because they are the same distance from 0 on the number line. I plotted them at the same point.

3. To get to the library, John walks  $\frac{1}{3}$  mile from his house. Susan walks  $\frac{3}{4}$  mile from her house. Draw a number line to model how far each student walks. Who walks farther? Explain how you know using pictures, numbers, and words.



$$\frac{1}{3} < \frac{3}{4}$$



Susan walks farther. My number lines show that  $\frac{1}{3}$  is closer to 0 than  $\frac{3}{4}$ , so  $\frac{1}{3}$  is less than  $\frac{3}{4}$ .

I can draw 2 number lines. John's number line is partitioned into thirds, and Susan's number line is partitioned into fourths. I have to make sure that both my number lines have the same distance from 0 to 1 because if the whole changes, then the distance between the fractions also changes. I wouldn't be able to compare the 2 distances accurately.