

3rd Grade Mission 5 Notes

Fractions- show equal parts of a whole.

Fractional unit- is each piece a shape is divided into.

Partitioned- means divided

1





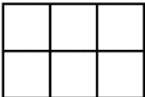
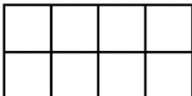
3

← Numerator:

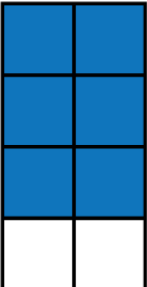
How many parts are referenced in the question (shown, taken, shaded, unshaded, etc).

← Denominator:

How many equal parts there are in the whole.


Diagram	Fraction Name (equal parts)	Unit form	Numerical Form
	Halves (2 equal parts)	1 half	$\frac{1}{2}$ $\frac{2}{2}$
	Thirds (3 equal parts)	1 third	$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$
	Fourths (4 equal parts)	1 fourth	$\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ $\frac{4}{4}$
	Fifths (5 equal parts)	1 fifth	$\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ $\frac{5}{5}$
	Sixths (6 equal parts)	1 sixth	$\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ $\frac{4}{6}$ $\frac{5}{6}$ $\frac{6}{6}$
	Eights (8 equal parts)	1 eighth	$\frac{1}{8}$ $\frac{2}{8}$ $\frac{3}{8}$ $\frac{4}{8}$ $\frac{5}{8}$ $\frac{6}{8}$ $\frac{7}{8}$ $\frac{8}{8}$

****unit fractions always have a 1 as the numerator.****

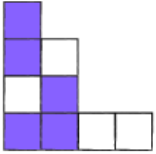


6 eighths ($\frac{6}{8}$) of the fraction is shaded

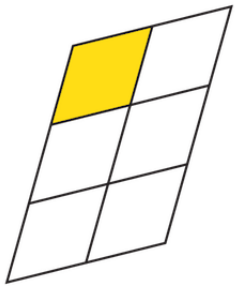
parts shaded total parts



1 tenth ($\frac{1}{10}$) is shaded
(1 represents parts shaded)
(tenth represents total parts)

	Total parts	Unit fraction	Shaded parts	Fraction shaded
	9	$\frac{1}{9}$	5	$\frac{5}{9}$

There are 6 sixths in 1 whole.



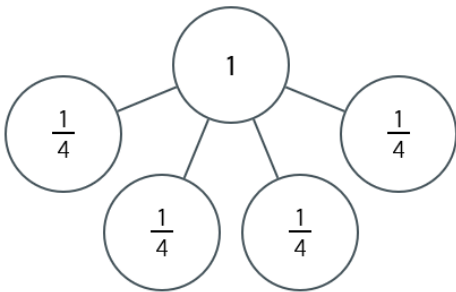
Shaded: 1 sixth
Not shaded: 5 sixths

There are 7 sevenths in 1 whole.

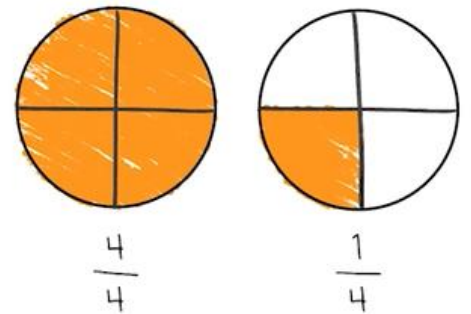
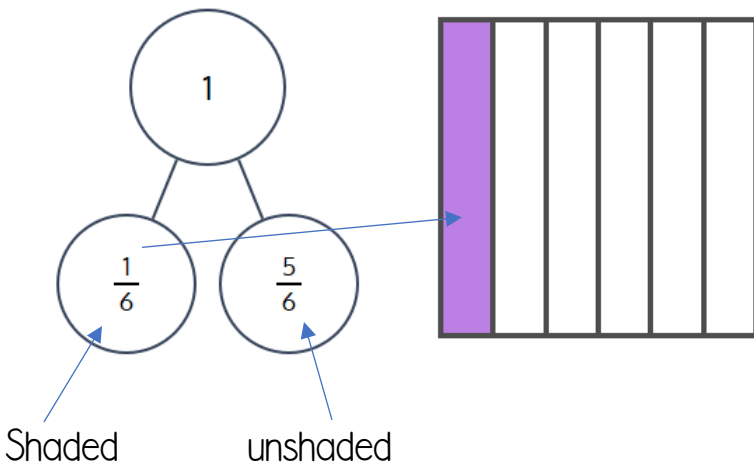
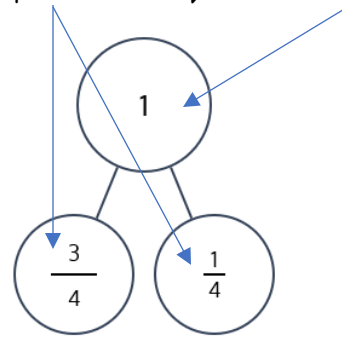


Shaded: $\frac{1}{7}$
Not shaded: $\frac{6}{7}$

4 fourths = 1 whole

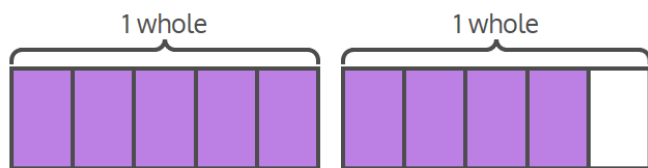


Add the parts to equal the whole



5 copies of $\frac{1}{4} = \frac{5}{4}$

9 fifths (9 parts are shaded, and each whole is divided into 5 equal parts.)

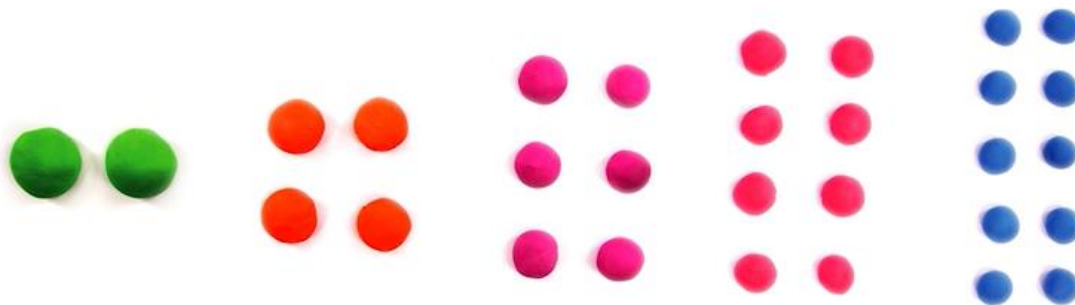


When comparing fractions with the same denominator:

The higher the number, the less the fraction is worth.

The smaller the number, the greater the fraction is worth.

$$\frac{1}{2} > \frac{1}{4} > \frac{1}{6} > \frac{1}{8} > \frac{1}{10}$$



When more people share something, the less they get.

1 whole = 2 halves or 3 thirds or 4 fourths or 5 fifths or 6 sixths or 8 eighths or 10 tenths

Greater than- bigger number



The hungry alligator always eats the **BIGGER** number.

Less than- smaller number

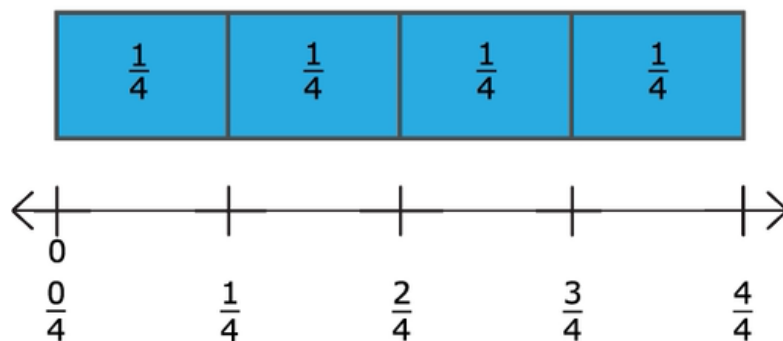
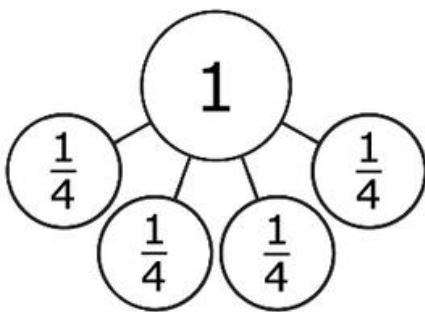
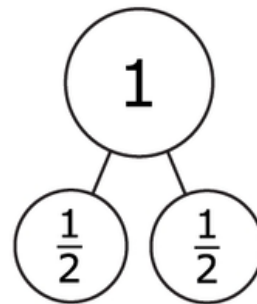
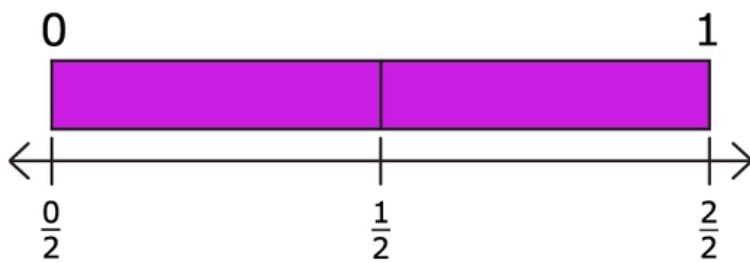
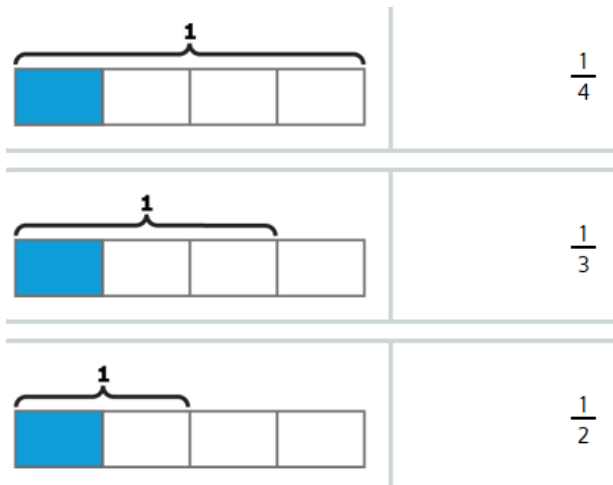


is less than

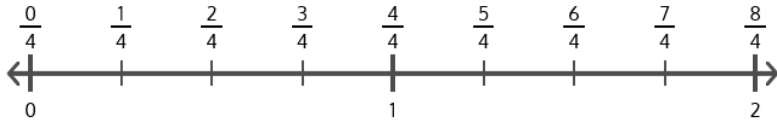
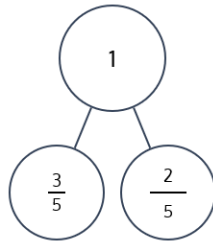
The hungry alligator turns **AWAY** from the **SMALLER** number.

You can compare fractions with that have the **SAME** size of the whole. If the sizes of the whole are **DIFFERENT**, then you can't compare them.

When you change the whole, it changes the unit fraction. Look at the **WHOLE** to determine the **UNIT FRACTION**.

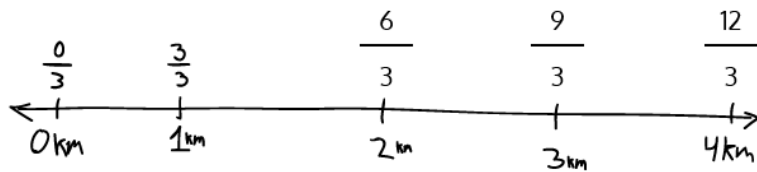


$\frac{3}{5}$ There are 5 equal parts in the whole.



There are 4 fourths in 1 whole. There are 8 fourths in 2 wholes.

4 fourths is equivalent to 1 whole.
8 fourths is equivalent to 2 wholes.

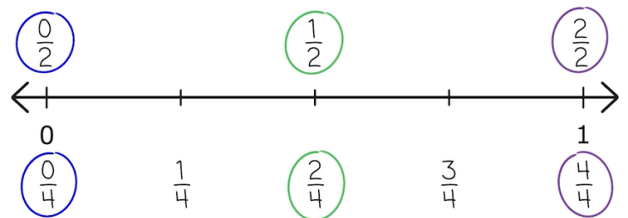


To figure out how many thirds there are in each whole, you can multiply the whole by how many it is partitioned into.

Example: $4 \times 3 = 12$

The smaller fraction will always be to the left of the larger fraction.

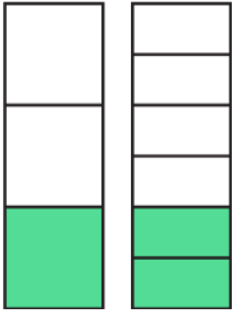
Equivalent- means equal



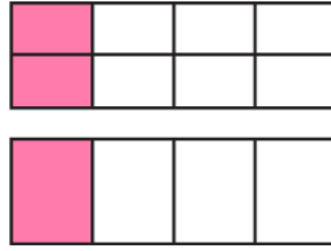
2 fourths is equivalent to $\frac{1}{2}$.

If two fractions are at the same point on the number line, they are equivalent.

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



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

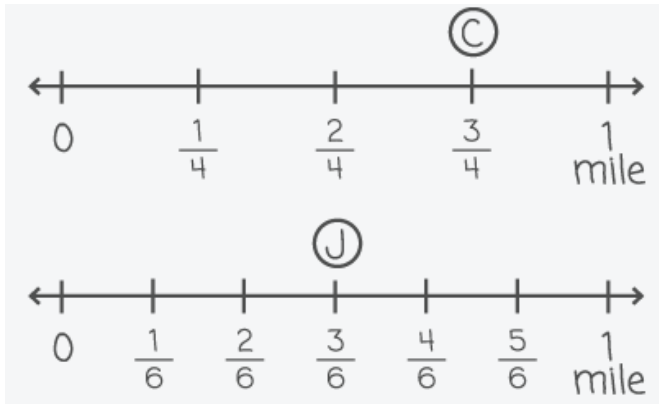


$$\frac{2}{8} = \frac{1}{4}$$

$$0 = \frac{0}{2} = \frac{0}{3} = \frac{0}{4}$$

$$1 = \frac{2}{2} = \frac{3}{3} = \frac{4}{4}$$

Carlos walks $\frac{3}{4}$ mile to school. Jonah walks $\frac{3}{6}$ mile to school. Who has a longer walk to school?



$$\frac{3}{4} > \frac{3}{6}$$

Carlos has a longer walk to get to school.

When trying to solve a problem with two different fractions, be sure to draw the whole evenly, then partition the whole into the stated fractions.