

Name: _____

Fractions on a Ruler

Mark the halfway point on the ruler below. How many inches are in each half? _____



Divide the ruler below into thirds. How many inches are in each third? _____



Divide the ruler below into fourths (quarters). How many inches are in each quarter? _____



Divide the ruler below into sixths. How many inches are in each sixth? _____



Divide the ruler below into twelfths. How many inches are in each twelfth? _____



THESE RULERS ARE FOR CUTTING!



Now, cut each ruler so you have **a whole ruler, a $\frac{1}{2}$ ruler, a $\frac{1}{3}$ ruler, a $\frac{1}{4}$ ruler, a $\frac{1}{6}$ ruler and a $\frac{1}{12}$ ruler.** Glue each piece onto the paper below, lining each up against the margin provided so you have a “staircase” of ruler fractions. Label them.



Use the rulers you divided and cut to answer the questions.



» How many sixths will make a third?

Think: there were 2 inches in a sixth of the ruler, there are 4 inches in a third of the ruler...

» How many fourths will make a half?

» How many twelfths do you need to make a fourth?

» How many twelfths do you need to make a sixth?

» How many twelfths do you need to make a third?



» Are two-sixths more or less than one-fourth? Prove it.

» Are five-twelfths more or less than two-thirds? Prove it.

» Are 6 inches more or less than four-twelfths of a foot? Prove it.

» Are 8 inches more or less than three-fourths of a foot? Prove it.

» Are 9 inches more or less than five-sixths of a foot? Prove it.



» Compare $\frac{1}{2}$ and $\frac{3}{6}$. What do you notice? Explain your thinking with a model and fraction notation.

» Compare $\frac{8}{12}$ to $\frac{2}{3}$. What do you notice? Explain your thinking with a model and fraction notation.

» Can you find 3 different combinations of fractional parts of a foot that are equal to 9 inches? Record your thinking using a model and fraction notation.

» How many different combinations of pieces can you find to show $\frac{2}{3}$ of a foot?