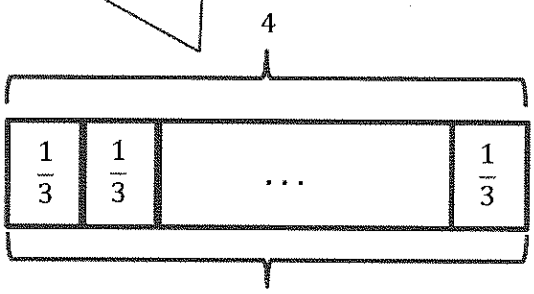
G5-M4-Lesson 28

My story problem has to be about 4 meters of string.

1. Create and solve a division story problem about 4 meters of string that is modeled by the tape diagram below.

The whole or dividend is 4 meters, and it is being cut into units of $\frac{1}{3}$ meter. One third is the divisor.



How many thirds are in 4? I can solve by dividing, $4 \div \frac{1}{3}$.

Allison has 4 meters of string. She cuts each meter equally into thirds. How many thirds will she have altogether?

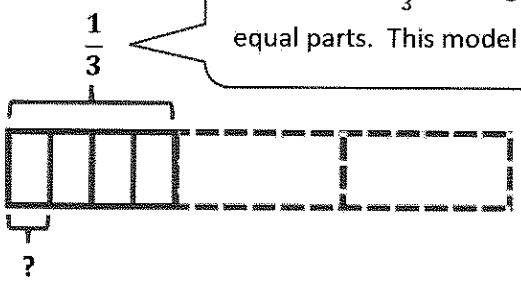
$4 \div \frac{1}{3} = 12$

Allison will have 12 thirds.

Since there are 3 thirds in 1, $2 = 6$ thirds, $3 = 9$ thirds, and $4 = 12$ thirds. Therefore, 4 divided by $\frac{1}{3}$ is equal to 12.

2. Create and solve a story problem about $\frac{1}{3}$ pound of peanuts that is modeled by the tape diagram below.

The dividend, $\frac{1}{3}$, is being divided into 4 equal parts. This model shows $\frac{1}{3} \div 4$.



$\frac{1}{3} \div 4 = \frac{1}{12}$

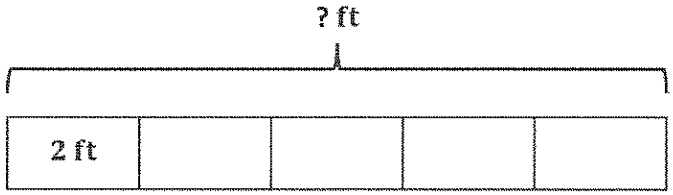
There are $\frac{1}{12}$ pound of peanuts in each bag.

Juanita bought $\frac{1}{3}$ pound of peanuts. She splits the peanuts equally into 4 bags. How many pounds of peanuts are in each bag?

3. Draw a tape diagram and create a word problem for the following expression, and then solve.

$2 \div \frac{1}{5} = 10$

I can interpret this expression as "2 is $\frac{1}{5}$ of what?"



This 2 foot unit is $\frac{1}{5}$ of the whole. This is what Eddie has finished.

The remaining $\frac{4}{5}$ are also 2 foot units. Eddie still has 8 more feet to dig.

After digging a tunnel 2 feet long, Eddie had finished $\frac{1}{5}$ of the tunnel. How long will the tunnel be when Eddie is done?

The tunnel will be 10 feet long.