

Splitting a Number into Parts

Thursday 12/4/08

Name:
Homeroom:
Mr. Z.'s Science Class
12/4/08

Do-now: Identifying the unit, the denominator, and the part

1. Fractions always involve splitting a thing into some number of parts.

a) The **unit** is _____

b) The **denominator** is _____

2. Observe the situation that Mr. Z. acts out, and identify the following:

Unit:	Denominator:	Part:

b) In English: A _____ of a _____ is a _____.

c) In math symbols: $\underline{1}$ =

3. Observe the situation that Mr. Z. acts out, and identify the following:

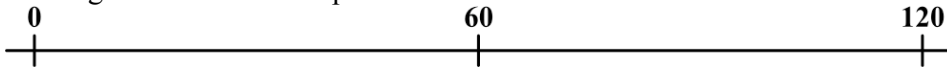
Unit:	Denominator:	Part:

b) In English: A _____ of a _____ is a _____.

c) In math symbols: $\underline{1}$ =

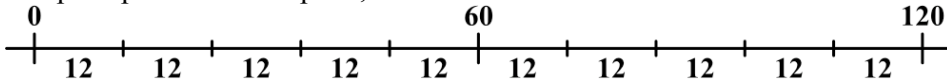
Drawing fractional parts on a number line

You will often be asked to draw a number line showing a fractional amount of some number. Start out by drawing and labeling the first two multiples of that number:



Notice that I start with zero (as number lines always do) and that I have written the multiples of my unit **above** their marks.

To split up the unit into parts, I use smaller marks:



If the problem asks you to write in what the size of the pieces is, that should be done under the line, in the middle of each piece, as shown here. Above the line is reserved for labeling the marks themselves. So, for example, you might later be asked to label the second small mark after 60 - it is 84, because it is sixty plus two hops of 12.

5. In the space below, draw a number line showing that "A half of twenty is ten." (*Remember to show zero and at least the first two multiples of the unit*)

6. In the space below, draw a number line showing that "A quarter of twenty four is six." (*Remember to show zero and at least the first **two** multiples of the unit*)

Number line fraction problems

As you do each of the problems below, remember that your number line must always start at zero and show at least the first **two** multiples of the unit.

6. Below, draw a number line in which units twenty one long are broken into thirds. Then, label each piece with its length.
7. Below, draw a number line in which units forty long are broken into eighths. Then, label each piece with its length.
8. Below, draw a number line in which units thirty two long are broken into pieces eight long. In order to draw this correctly, you will have to figure out what the denominator is for that unit and part.
9. Below, draw a number line in which units thirty long are broken into pieces five long. In order to draw this correctly, you will have to figure out what the denominator is for that unit and part.
10. Below, draw a number line in which the units are broken into halves, and each piece is twenty two long. You will have to figure out what the unit is in order to draw this.
11. Below, draw a number line in which the units are broken into fourths, and each piece is thirteen long. You will have to figure out what the unit is in order to draw this.