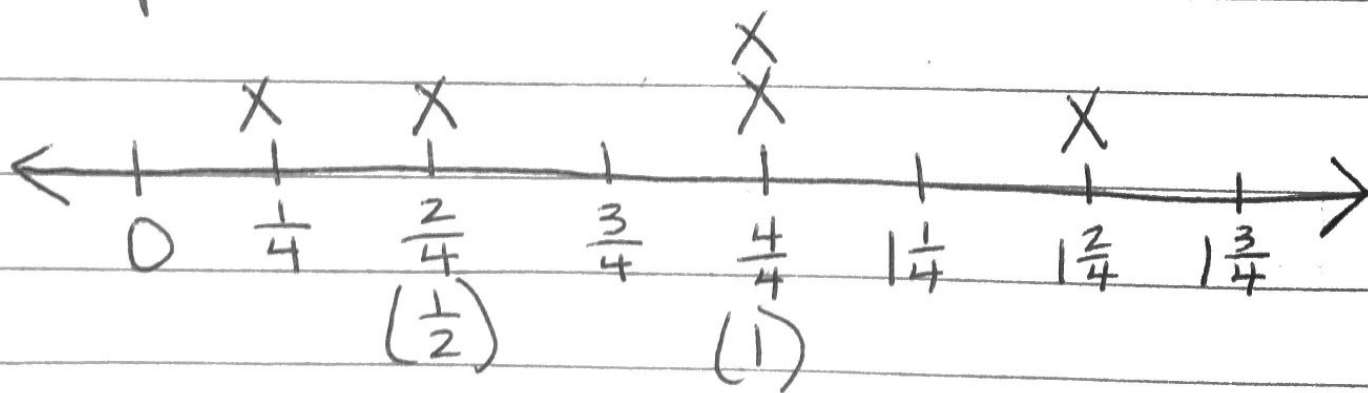


Line Plots are a way to show data on a numberline.

The x's represent how many times the number repeats.



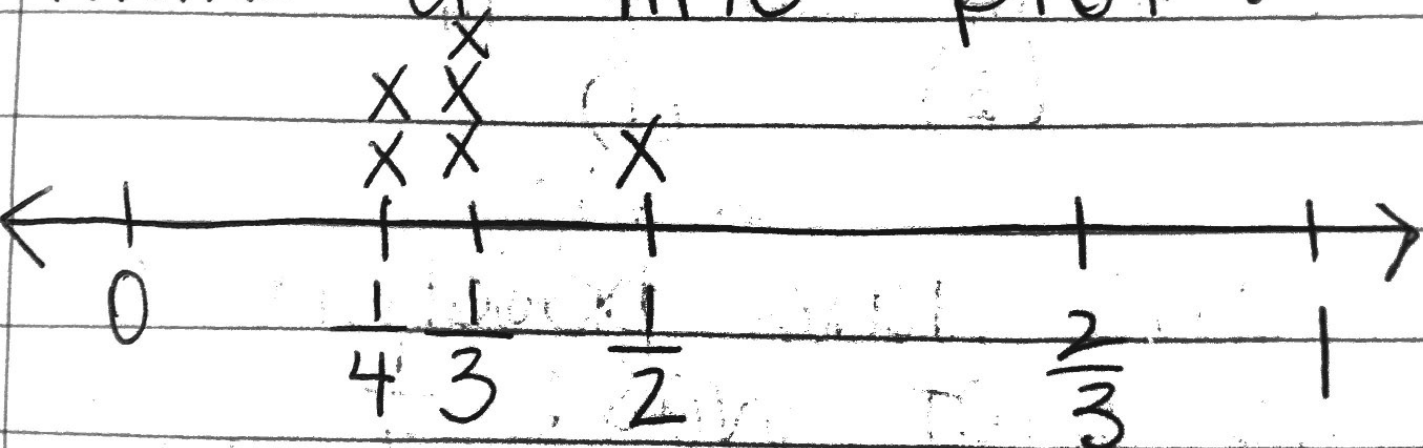
So the data used to create this plot was: $\frac{1}{4}$, $\frac{2}{4}$, 1, 1, $1\frac{2}{4}$.

Example:

6 friends shared several sub sandwiches. Each sandwich was 1 foot long. The data below shows the amount each friend ate.

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

Make a line plot:



Steps to making a Line Plot

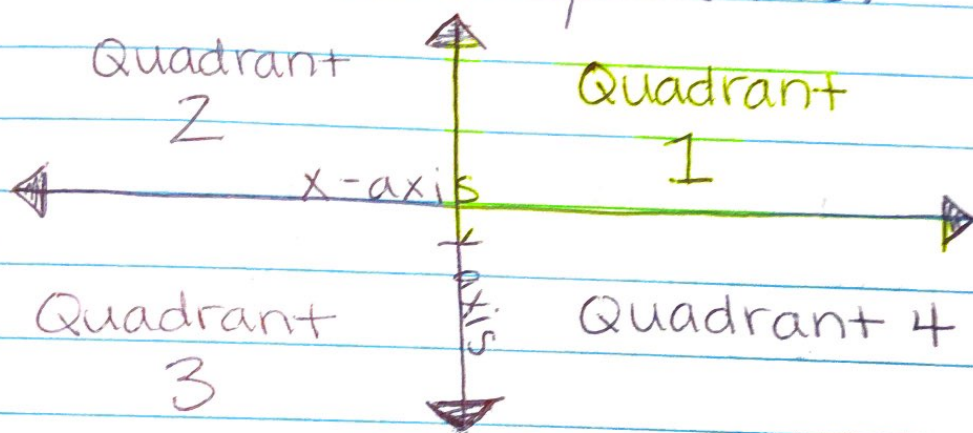
1. Order the data from least to greatest.
2. Decide the smallest and greatest numbers to create your numberline.
3. Create a numberline using equal parts. (no skipping numbers!)
4. Use X's to represent each number in your data.

★ Students received a handout to make a line plot using candy colors as an example.

Coordinate Planes

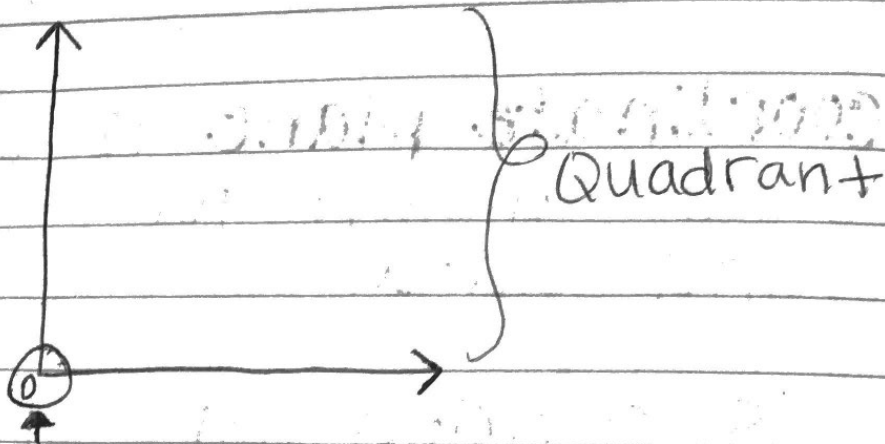
A **coordinate plane** is a type of graph for showing data.

It is divided into 4 **quadrants** (sections) by an x and y axis.



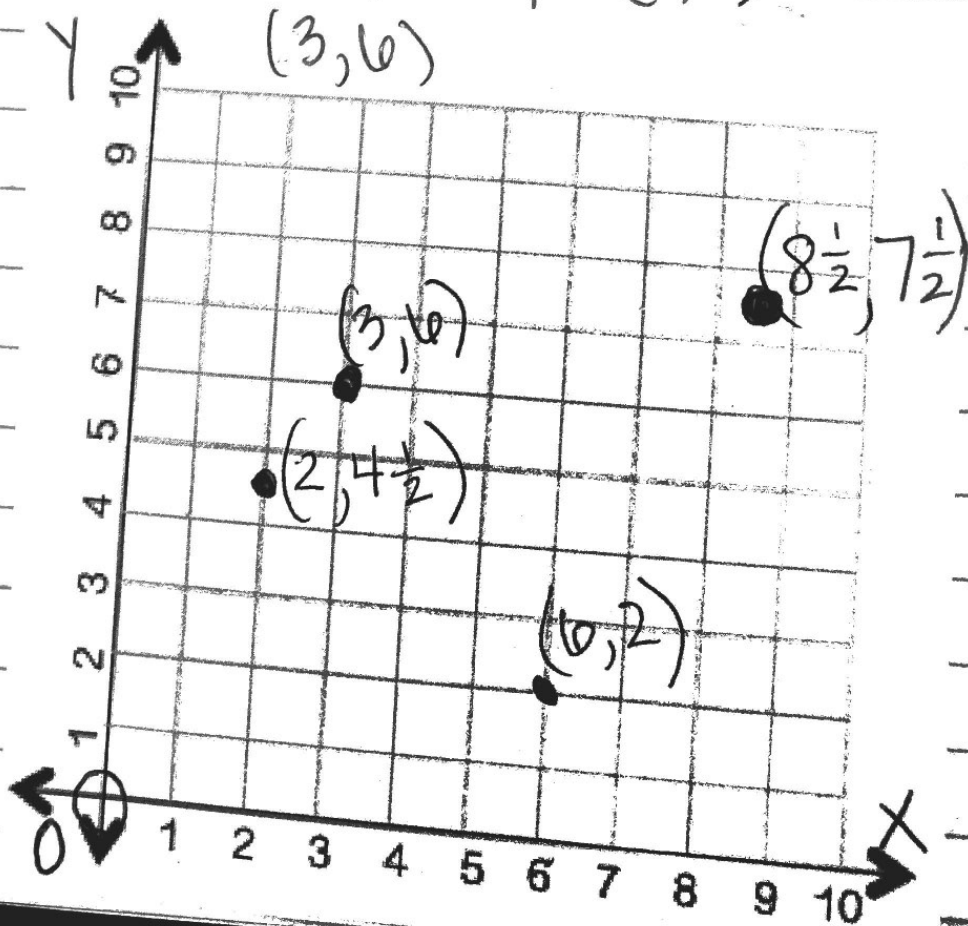
To find a point on the coordinate plane, you use ordered pairs.

Ordered pairs are 2 numbers that represent a point in the coordinate plane. (x, y) (\rightarrow, \uparrow)
run, then jump



origin - this is where the x and y intersect (cross).
It is always 0 (zero).

★ To plot an ordered pair you first go across \rightarrow (x)
then up \uparrow (y)



Measurement

Includes:

- Linear / Length / Distance
- Weight / Mass
- Capacity / Volume (how much something can hold)
- Temperature
- Time

Customary Units

Customary Units of Length



1 foot (ft) = 12 inches (in)
1 yard (yd) = 3 feet (36 inches)
1 mile (mi) = 5,280 feet (1,760 yards)



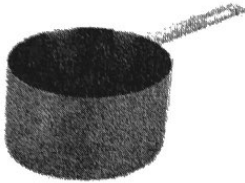
Customary Units of Weight



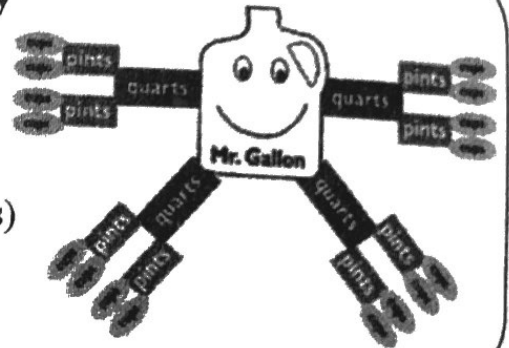
1 pound (lb) = 16 ounces (oz)
1 ton (T) = 2,000 pounds



Customary Units of Capacity



1 cup (c) = 8 ounces (oz)
1 pint (pt) = 2 cups (16 ounces)
1 quart (qt) = 2 pints (32 ounces)
1 gallon (gal) = 4 quarts (128 ounces)



Time

60 minutes = 1 hour

24 hours = 1 day

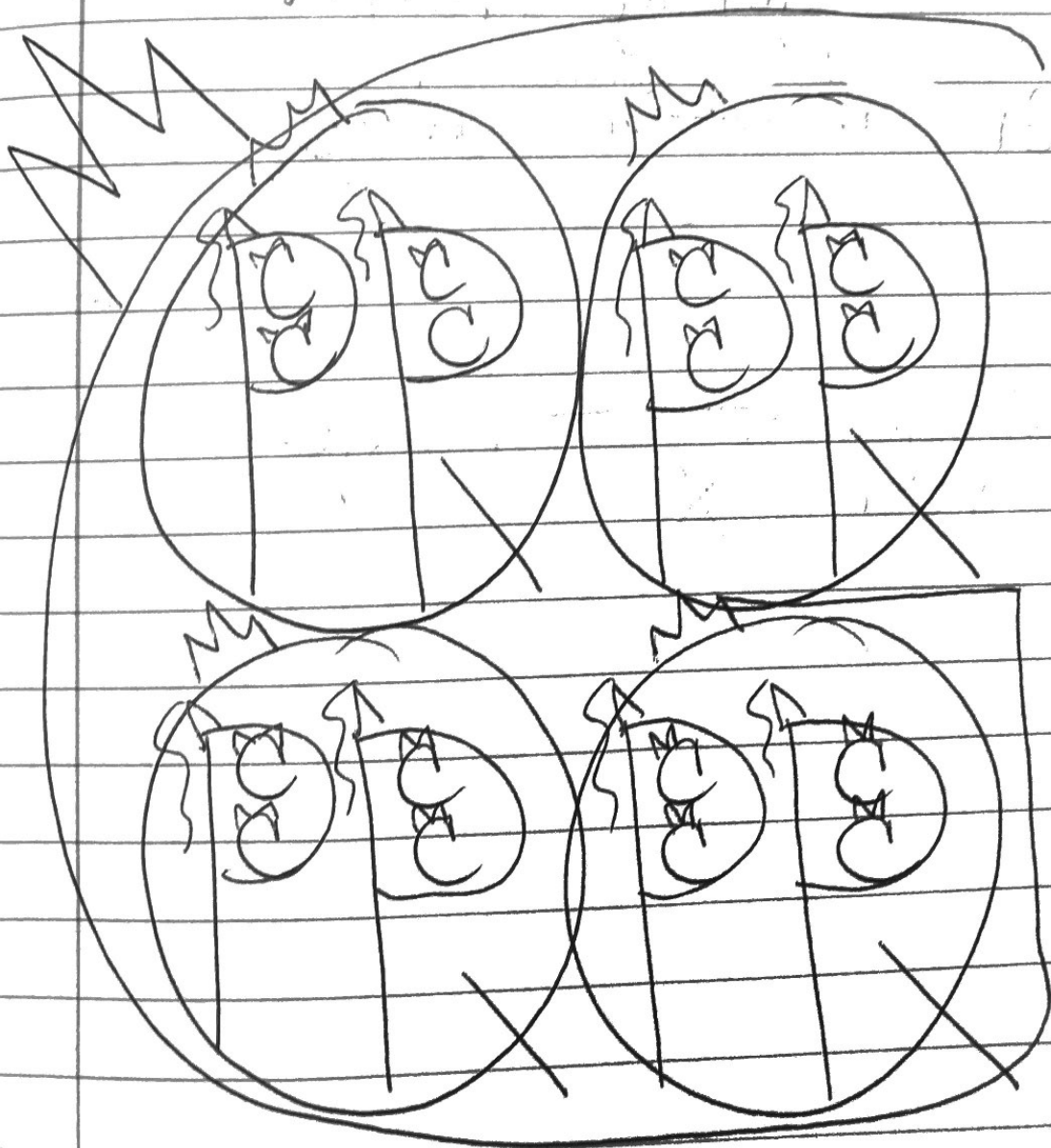
365 days = 1 year

Customary Units for Capacity "King Gallon"

King Gallon had 4
queens (quarts).

Each queen had 2 princesses
(pints).

And each princess had 2
cats (cups)



Converting Measurement

"convert" means to
change!

When changing units
you need to know
which unit is larger.

When going from:

Small \rightarrow large
you \div

Small \leftarrow large
you \times

Converting Customary Units.

example: How many inches are there in 4 feet?

12 inches = 1 foot, then

$$12 \times 4 = 48 \text{ inches.}$$

Since we are converting feet, which are larger than inches, we multiply.

example: How many quarts make up 6 cups?

Since we are converting cups to quarts we divide by how many cups are in a quart:

$$6 \div 4 = 4 \overline{)6} = 1 \frac{2}{4} \text{ quarts}$$

2

Converting Customary Practice
Pg 809 / 827 / 835 / 841

① 72 inches = 6 ft
 $72 \div 12 = 6$

② 19 yards = 684 in.
 $19 \times 36 = 684$

③ 40 inches = $3\frac{1}{3}$ ft
 $40 \div 12 = 3\frac{1}{3}$

④ 96 oz = 6 lb
 $96 \div 16 = 6$

⑤ 7 tons = 14,000 lb
 $7 \times 2,000 = 14,000$

⑥ 1.5 tons = 3,000 lb
 $1.5 \times 2,000 = 3,000$

⑦ 3 pints = 6 cups
 $3 \times 2 = 6$

⑧ 4 gallons = 32 pints
 $4 \times 8 = 32$

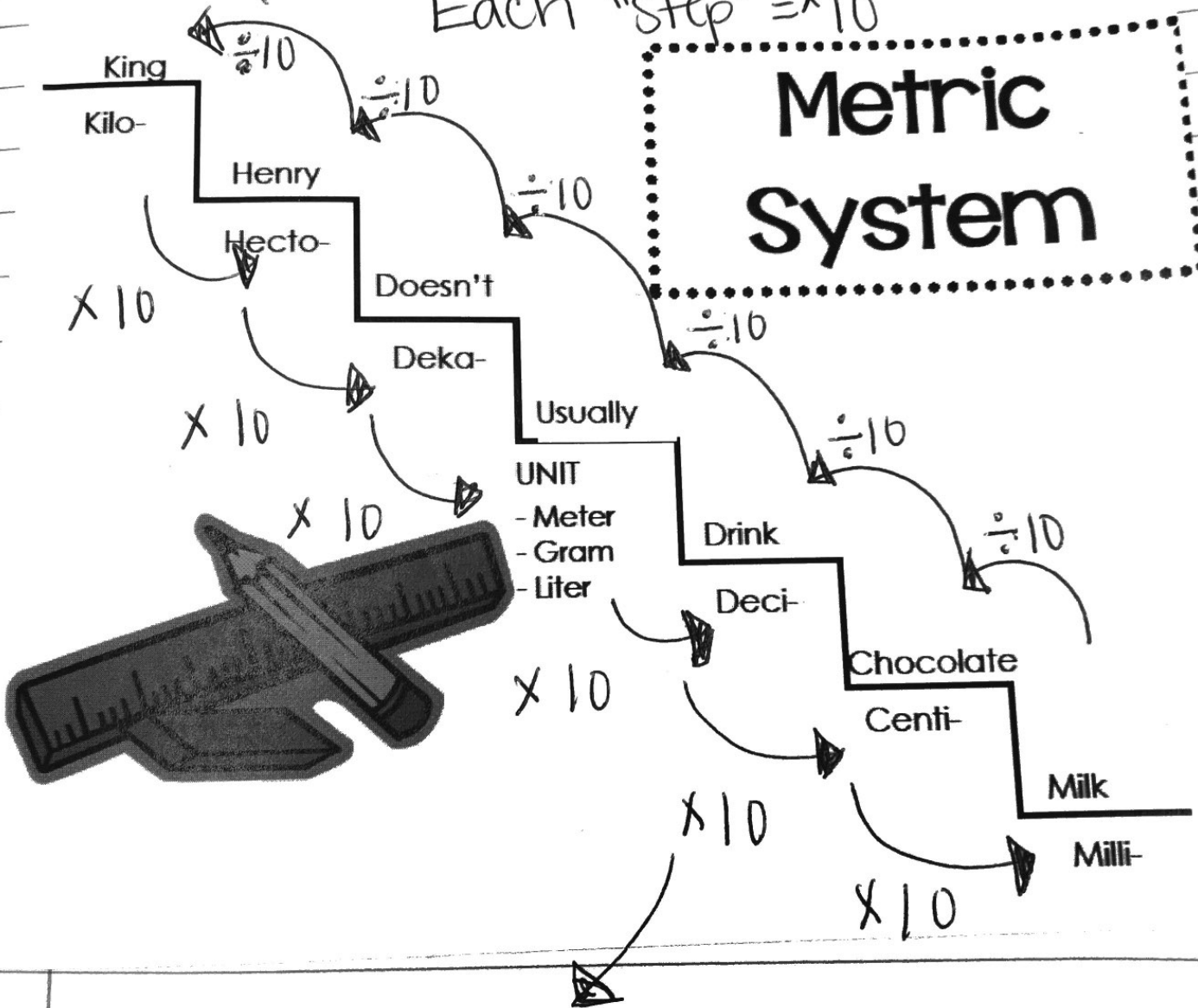
⑨ 12 cups = 6 pints
 $12 \div 2 = 6$

Converting Metric Units

When going small to large, you still divide! (move decimal left)

Each "step" = $\times 10$

Metric System



When converting larger units to smaller units, you still multiply. (add zeros)