

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Using Percents to Draw a Circle Graph

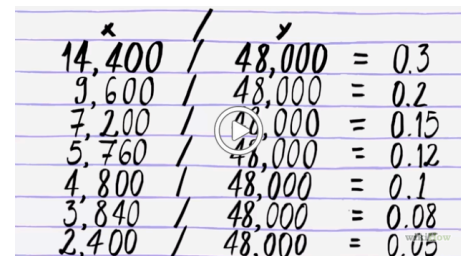
### Step 1: Organizing Data

Collect your data and list it in descending order (largest to smallest).  
Add up all of your data to find the total, this is your **denominator**.



### Step 2: Calculating Percentages

Calculate the percentage of the total for each data point/ category by dividing each one by the denominator (total).

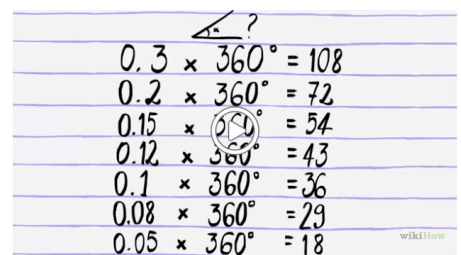


### Step 3: Calculating Degrees

Calculate the angle between the two sides of each pie slice by multiplying each percentage (still in decimal form) by 360.

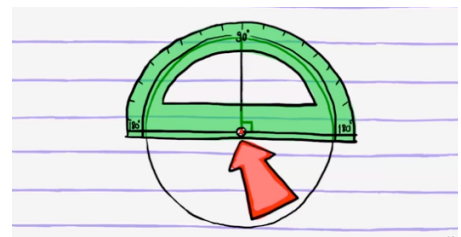
The logic behind this is that there are 360 degrees in a circle.

If you know that 14,400 is 30 percent of the whole (or 0.30), then you're calculating 30% of 360 which is 108.



### Step 4: Drawing the Chart

Use a compass to draw a correct circle. Measure the radius and diameter, and draw these on to your circle. You'll need these to correctly measure the degrees of each section.



### Step 5: Draw Each Section Division

Position your protractor on the circle so that the 90 degrees is situated directly above the center of the circle. Draw the sections by marking the first division against the edge of the protractor at the correct angle, using the angle formulations you got in the earlier step.

Each time you add a section, the radius changes to the line you just drew; rotate your protractor accordingly.

