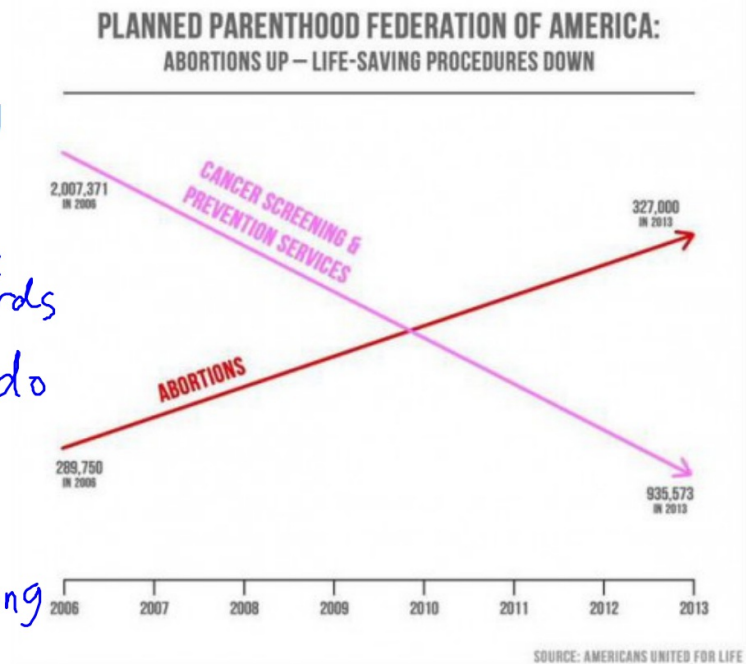


# Warm Up



Is this graph helpful or misleading? Explain using evidence.

- no vert. axis
- graph numbers are misleading & backwards
- lines have nothing to do w/ each other
- lines should not cross
- numbers are simply wrong
- biased title



Thu. Oct. 1

Objective: SWBAT determine whether a set of data is normally distributed

Agenda:

- Warm Up
- HW Huddle
- Notes
- Practice
- Begin Chapter Review
- Reflection

HW: pg. 132  
#51, 56, 61, 66

## HW Huddle

### Notes: Assessing Normality

Before we can do the normal distribution tricks we've learned, we need to know that the data is normally distributed.

Ways to do this include:

- checking a histogram
- using the empirical rule (68-95-99.7 rule)
- looking at a normal probability plot

## Example

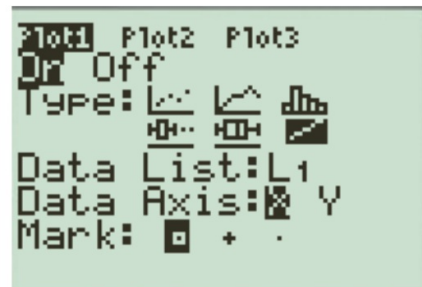
pg. 125

### Notes: Normal Probability Plot

A normal probability plot compares each element with its z-score.

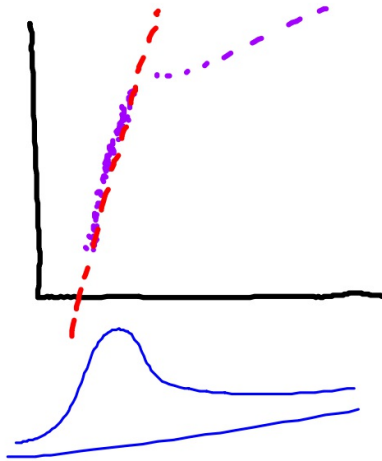
- If the data is normally distributed, the plot will look like a straight line

In the calculator: under "stat plot"

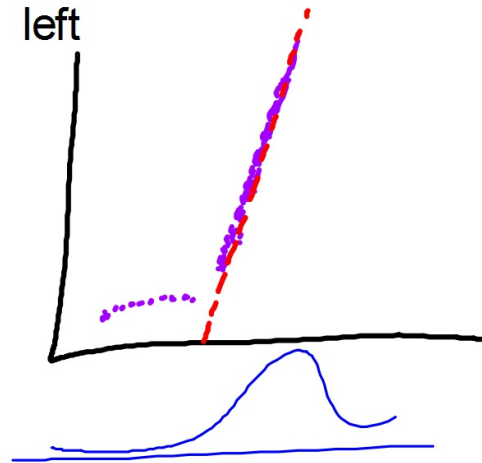


## Skew on a Normal Probability Plot

Right skew: the largest observations "pull" to the right



Left skew: the smallest observations "pull" to the left



## Example

Make a normal probability plot for the last example. Can we reasonably say the data are normally distributed?

## Practice

Continue with the practice from ~~Tuesday.~~  
Thursday

## Begin Chapter Review

What have we done this chapter?

## Reflection

How do we know if data follow a normal distribution?