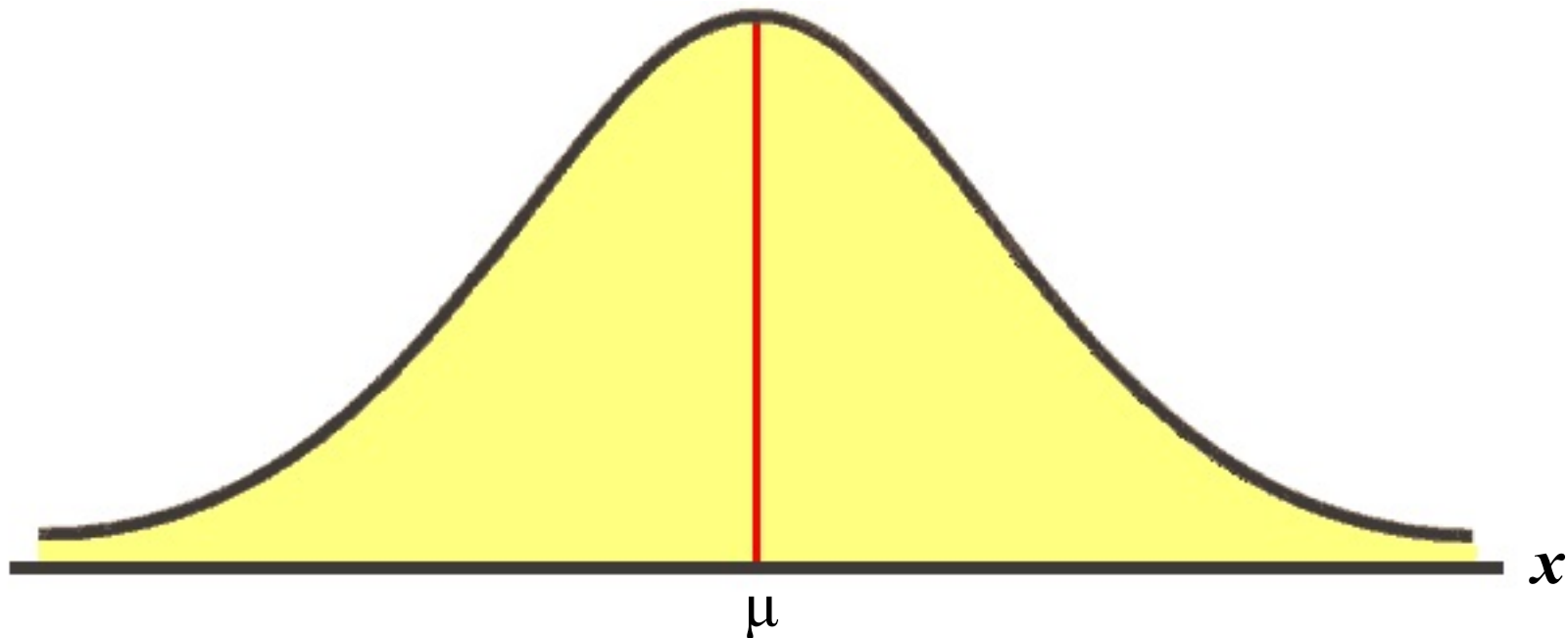


I. Normal Curve (p.273):

1. A.k.a. the Bell Curve
2. Graph represents the relative frequency (or probability) distribution of a continuous variable...



3. Peak (max frequency) occurs at the mean, $x = \mu$
4. Symmetric about (the vertical line), $x = \mu$
5. Area under the curve (from $-\infty$ to ∞) is 1
6. Mean, median & mode are all equal

II. Empirical Rule (p.274):

1. 68% of the Area under the curve lies in the interval between $\mu - \sigma < \mathbf{x} < \mu + \sigma$
2. 95% of the Area under the curve lies in the interval between $\mu - 2\sigma < \mathbf{x} < \mu + 2\sigma$
3. 99.7% of the Area under the curve lies in the interval between $\mu - 3\sigma < \mathbf{x} < \mu + 3\sigma$

III. Examples (pp.282-283): #6,8,10

IV. Area Interpretation (p.276): the % area of the graph that lies within the interval $a < \mathbf{x} < b$, represents the % of data items in a sample/population found in the interval, as well as the probability that a random data value “ \mathbf{x} ” lies in the interval.

V. Control Graph (pp.277-279):

line graph which helps to identify “warning signals” for outliers and/or alarming trends;

- A. Graph details/procedure requires horizontal lines depicted at the values of μ , $\mu \pm 2\sigma$, and $\mu \pm 3\sigma$...
- B. Control alerts for “out of control” signals consists of three major types, I, II & III (provided on all tests).

VI. Example (p.283): #12

HW: pp.281-285 / #3,5,9,13,15

Read pp.288-296 (section 6.2)