

Warm Up

1. Convert the following to exponential form:

$$\ln x = 6$$

$$x = e^6$$

2. Solve the following: $\log(4x) = \log(x + 15)$

$$4x = x + 15 \quad 3x = 15 \quad x = 5$$

3. Solve the following using the quadratic

formula: $5x^2 + 3x + 5 = 0$ $x = \frac{-3 \pm i\sqrt{91}}{10}$

4. Identify the 250th term of the following

sequence: 6, 9, 12 $a_n = 6 + (n-1)3$

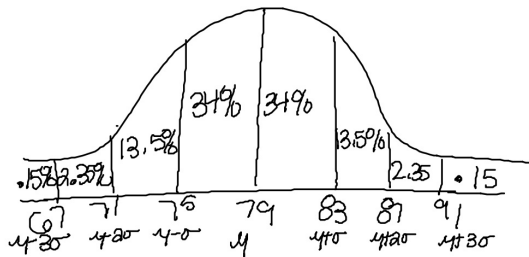
$$a_{250} = 753$$

5. Identify the 12th term of the following

sequence: 3, 6, 12 ... $a_n = 3(2^{n-1})$ $a_{12} = 6144$

Example #1

The data for the log quiz was normally distributed. The average score was a 79 with a standard deviation of 4. Represent this data using the normal curve.

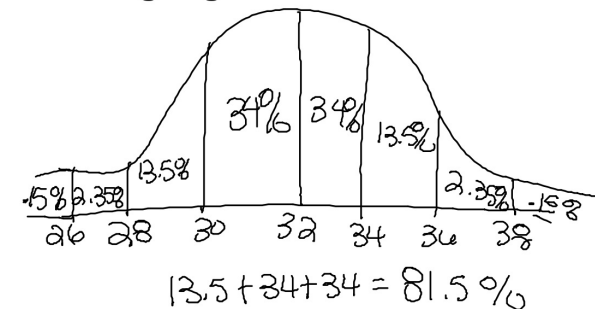


Write down 2 observations for the example above.

Review of the Normal Curve

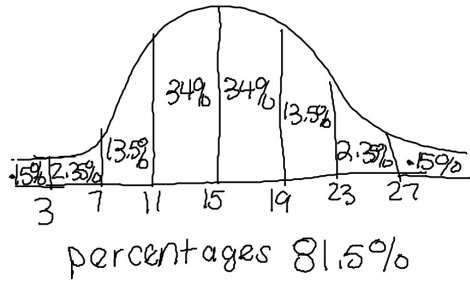
Example #2

Steph Curry is currently averaging 32 points per game with a standard deviation of 2 points. What percentage of the time does he score between 28 - 34 points during a game?



Example #3

At Vance High School, 350 students took the ACT last March. The average score was a 15 with a standard deviation of 4. How many students scored between a 11 - 23?



$$\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

$$\frac{x}{350} = \frac{81.5}{100}$$

$$100x = 28525$$

$$x = 285.25$$

$$x = 285$$