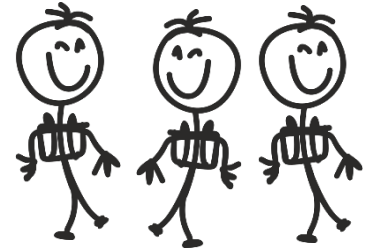


# Monday, February 4, 2019



- Warm-Up

- The principal of a large high school is concerned about the number of absences for students at his school. To investigate, he prints a list showing the number of absences during the last month for each of the **2500** students in the school. For this population of students, the distribution of absences last month is skewed right with a mean of  $\mu=1.1$  and a standard deviation of  $\sigma=1.4$ . Suppose that a random sample of **50** students is selected from the list printed by the principal and the sample mean number of absences is calculated.

- What is the shape of the sampling distribution of the sample mean. Explain.
- What are the mean and standard deviation of the sampling distribution of the sample mean?

- Check Homework

- Investigative Task

# Objectives

- **Content Objective:** I will find the mean and standard deviation of a sampling distribution and apply the Normal model to determine probability.
- **Social Objective:** I will listen and focus on the lesson despite distractions.
- **Language Objective:** I will use correct vocabulary and clearly ask questions when I do not understand.

# Warm-up

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*approximately normal*

- What is the shape of the sampling distribution of the sample mean. Explain.
- What are the mean and standard deviation of the sampling distribution of the sample mean?

$\downarrow$   
1.1

$\downarrow$   
 $\frac{1.4}{\sqrt{50}} = 0.197$

*random stated ☺*  
*10% 50 < 10% of 2500*  
*n = 50 > 30*  
*large enough sample*

# Investigative Task



