

**Math 090 Activity**  
**Understanding Differences**

In order to understand two-population confidence intervals in Statistics, we need to review differences. A two-population confidence interval is the answer to a subtraction problem (difference). Let's review what subtraction actually tells us.

1.

$$17 - 4 = ?$$

Is the difference positive or negative?

Is the first number larger or smaller than the second number?

How much larger or smaller is the first number than the second?

Write a sentence to explain what the answer to the subtraction problem (difference) tells us.

2.

$$5 - 12 = ?$$

Is the difference positive or negative?

Is the first number larger or smaller than the second number?

How much larger or smaller is the first number than the second?

Write a sentence to explain what the answer to the subtraction problem (difference) tells us.

3.

$$9 - 9 = ?$$

Is the difference positive, negative or neither?

Is the first number larger, smaller or the same as the second number?

Write a sentence to explain what the answer to the subtraction problem (difference) tells us.

4.

When the answer to a subtraction problem (difference) is positive, what do we know about the two numbers being subtracted?

5.

When the answer to a subtraction problem (difference) is negative, what do we know about the two numbers being subtracted?

6.

When the answer to a subtraction problem (difference) is zero, what do we know about the two numbers being subtracted?