

Answer the following questions showing formulas used to support your answers.

1. A negative z-score signifies that the original score is _____.

2. Given a mean test score of 75 and a standard deviation of 10 calculate the following:
 - a) What would your z-score be if you scored an 85 on the test?

 - b) What would your z-score be if you scored an 93 on the test?

 - c) What would your z-score be if you scored an 70 on the test?

 - d) What would your z-score be if you scored an 60 on the test?

 - e) What would your test score be if you had a z-score of -2?

 - f) What would your test score be if you had a z-score of 0?

 - g) What would your test score be if you had a z-score of 1.5?

 - h) What would your test score be if you had a z-score of 1.23?

3. On a reading comprehension test, Marie's z-score is 2.3 and Joan's is 1.75. Which girl performed better on the test and why?

4. Assume that the average height of the boys basketball team is 71" with a standard deviation of 2.5" and that the girl's team is 68" with a standard deviation of 3". Compare the heights of a male that is 74" tall to a female that is 71".

Weighted Mean Worksheet

Name _____

Ex. The average score on your prep work is 72%. Your test score average is 85%. Your final grade is based on: 20% prep work, 65% tests and 15% final exam.

a) What do you need on the final to earn an overall grade of a "B" (80%) in the class?

b) What do you need on the final to earn an overall grade of a "C" (70%) in the class?

c) Can you earn an "A" (90%) in the class?

1. Your final grade is based on: 20% prep work, 65% tests and 15% final exam. You've earned 220 out of 250 points for prep work. Your test scores have been 80, 87, 93 and 95. If you score a 90 on the final, what will be your overall class percentage?

2. Your final grade is based on: 20% prep work, 65% tests and 15% final exam. You've earned 220 out of 250 points for prep work. Your test scores have been 80, 87, 93 and 95. What do you need to earn on the final in order to earn at least a "C", "B" and "A" in the class?

3. Repeat #2 above but this time you earned only 50 points out of 250 for the prep work.