**Unit 5 Constructive Response Test Review**

Constructive Response #1

Jacob has $5 more than three times as much money as Jose. Jose has x dollars. Jacob does not have enough money to buy a video game that costs $80, but he has enough money to buy earbuds that costs $35.

1. Write a compound inequality that represents all of the possible amounts of money Jacob could have in terms of x.
2. What is the least amount of money Jose could have?
3. Jose has a whole number of dollars. List the different possible amounts of money, in dollars, Jose could have.

Constructive Response #2

Maria is going to solve the inequality shown below. In the inequality, w represents the width of a rectangle.

$$|-5-7w|\geq 68$$

1. Solve the inequality. Show your work.
2. Graph the inequality on this number line.
3. Maria says -12 is a reasonable solution to the inequality. Explain why Maria thinks that, but also explain why she is incorrect in this situation.

Constructive Response #3

A student earns the following test scores: 82 and 92. What must they score on the third test if they want a test average between 80 and 90, inclusive?

1. Write a compound inequality to represent the situation.
2. Solve your compound inequality, showing all work.
3. Explain what your answer to part (b) means.

Constructive Response #4

Two inequalities are shown below.

$$-45<10k-15 2k-3<5$$

1. Write a compound inequality to combine the inequalities above.
2. Solve your compound inequality for values of k. Show your work.
3. Graph your solution on the number line below.