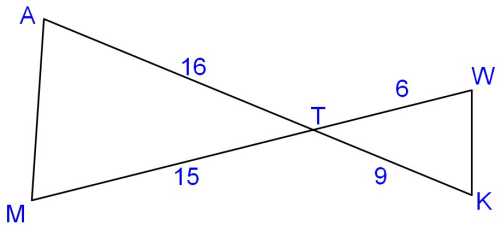
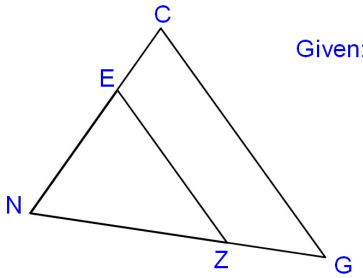
Bellwork Thursday, February 27, 2014

1. Are these triangles similar? If yes, write a similarity statement.



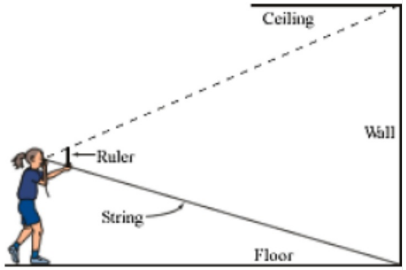
2. Are these triangles similar? If yes, write a similarity statement.



Given: $\angle NCG \cong \angle NZE$

3.

Kristin has developed a new method for indirectly measuring the height of her classroom. Her method uses string and a ruler. She tacks a piece of string to the base of the wall and walks back from the wall holding the other end of the string to her eye with her right hand. She holds a 12-inch ruler parallel to the wall in her left hand and adjusts her distance to the wall until the bottom of the ruler is in line with the bottom edge of the wall and the top of the ruler is in line with the top edge of the wall. Now with two measurements, she is able to calculate the height of the room. Explain her method. If the distance from her eye to the bottom of the ruler is 23 inches and the distance from her eye to the bottom of the wall is 276 inches, calculate the height of the room.



4. Abe is 5 feet tall and is 13 feet from the mirror. The mirror is located 60 feet from the tree. How tall is the tree?