AMDM Name:

Review #1 Date:

Solve for the given variables in the following problems.

1. $\frac{x}{8}=\frac{10}{5}$ 2. Volume of a sphere 3. \_\_\_\_in. = 8 feet 4. \_\_\_\_ feet = 3 miles

 x=\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_

5. In a parade going down the street, how many people can stand along a sidewalk 15 ft wide and 2 miles long? (Both sides of the street) (Each person takes up 3 square feet)

6. Given a classroom with dimensions 25ft x 25ft x 15ft, how many tennis balls would it take to fill the classroom? (assume diameter of tennis ball is 2.5in)

7. If a TV has a 80in screen, how many square feet of viewing space does the TV have if the aspect ratio is 16:9?

a. First, find the width and the height of the TV? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. What is the area of the screen? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Determine the **assumptions** necessary to determine how many drinks are sold each day out of the vending machines at Buford High School. (**do not solve**)

10. **Explain the process necessary and then solve** to determine if all the people in the school could fit inside a room that is 60x30x15 feet. (2.5 square ft per person) Remember to explain and show mathematical support.

11. Determine how many license plates are possible given the following restrictions on the numbers and letters. X- any letter  **Z**- any letter except a vowel **9**- any #0-9 **8**- #2-9  **Y**- any #1-9

 a. XXX 99X

 b. ZZZ 88Y

 c. XZX 9X8Z