Estimating Crowd

Conversions

1. Determine the following conversions: 2) Using your conversions, answer the following questions:

a) 1 ft = _____ in.   a) How many feet is 47 in?

b) 1 yd = _____ ft.

c) 1 mile = _____ ft.   b) How many feet is 10 yds?

Remembering how to set up and solve proportions.

Proportion: <u>Two ratios set equal to each other</u>

3) A jar that is 75 in^3 will hold 17 large gumballs. How many large gumballs would a jar that is 300 in^3 hold?

4) Make a square measuring 5 feet by 5 feet, and have your friends stand inside it as if they are watching a band at a small club. Count the number of your friends that comfortably fit in the rectangle and find the ratio of this number to the rectangle's area. Explain in your own words what this ratio means.

5) Use this value to estimate the size of a crowd that is 10 feet deep on both sides of the street standing along a 1-mile section of a parade route.

6) One rule of thumb for estimating crowds is that each person occupies 2.5 square feet. Use this rule to estimate the size of the crowd watching a parade along the 1-mile section of the route in Question 2.