Slope Word Problems

1. The cost of a school banquet is $95 plus $15 for each person attending. Write an equation that gives total cost as a function of the number of people attending. What is the cost for 77 people?

2. In 1980 the average price of a home in Brainerd County was $97,000. By 1986 the average price of a home was $109,000. Write a linear model for the price of a home, P, in Brainerd County as a function of the year, t. Let $t = 0$ correspond to 1980.

3. Roman paid $150 to join a handball club. He pays an additional $15 every time he uses one of the club's handball courts. Write an equation that describes Roman's total cost for playing handball as a function of the number of times he plays.
   Let C = the total cost and n = the number of times he plays.

4. A sunflower in Julia Rosario's garden was 12 centimeters tall when it was first planted. Since then, it has grown approximately 0.6 centimeters per day. Write an equation expressing the sunflower's height, H, in terms of the number of days, d, since it was planted.

5. Billy plans to paint baskets. The paint costs $14.50. The baskets cost $7.25 each. Write an equation that gives the total cost as a function of the number of baskets made. Determine the cost of four baskets.

6. A real estate sales agent receives a salary of $250 per week plus a commission of 2% of sales. Write an equation that gives the weekly income y in terms of sales x.