Word Problems: Practice Quiz

1) A video store charges $3 per rental. The store offers the following "frequent movie plan":
$96 annual fee and movies are $1 per rental.
a) Should a person use the "frequent movie plan" if he rents 2 movies per month?
b) What is the "break even point"? (i.e. the cost of rentals w/o plan = cost of rentals with plan)
c) The video store is offering the movie plan for $50. What is the new "break even point"?

2) An investor lost 10% last year. What percentage increase must he have this year to end up with his <u>original</u> investment?

3) You have 14 feet of wood.
a) How many different types of rectangular enclosures could you make? (Each side must be a whole number)
b) Which will create the largest area?

**Bonus Questions
c) How many different types of isosceles triangles could you make? (each side must be a whole number)
d) Which will create the largest area?

4) Assume you run a 5K race in 20 minutes.
a) Express your speed in miles per hour.
b) Determine the average rate of each mile.

5) The length of a rectangle is twice the width. If the length is decreased by 1, and the width is increased by 3, the area is 72 square meters. Find the original length and width.