Area and Perimeter Word problems

1.) A square picnic blanket has <mark>sides that are 10 feet long</mark>. What is the blanket's area?

- Remember squares sides are all congruent to one another, so each side length of the square is 10 feet.

$$A = bh$$

Next, substitute your values in for base and height

$$A = (10)(10)$$

Next, multiply to get your answer.

$$A = 100in^2$$

2.) A rectangular garage has an <mark>area of 54 square meters</mark>. Its <mark>perimeter is 30 meters</mark>. What are the dimensions of the garage?

So, we need to find the length and width of the garage.

$$A=bh \qquad\qquad P = 2l + 2w$$

Next, make a table of all values length and width could be based on area

Dimensions	Area	Perimeter
1 by 54	1 x 54 = 54	1 + 1 + 54 + 54 =110
2 by 27	2 x 27 = 54	2 + 2 + 27 + 27 = 58
3 by 18	3 x 18 = 54	3 + 3 + 18 + 18 = 42
6 by 9	6 x 9 = 54	6 + 6 + 9 + 9 = 30

The dimensions of the garage would be 6 by 9 since it gives you an area of 54 and a perimeter of 30

3.) A square piece of confetti has a ==perimeter of 40 millimeters==. How long is each side?

- Remember squares sides are all congruent to one another, and a square has 4 sides

- So, you would take the perimeter of 40 divided by 4 sides to get the side length

$$40/ 4 = 10$$

4.) A rectangular hotel room is ==20 feet wide and 24 feet long==. What is its perimeter?

$$P = 2L + 2w$$

Next, substitute the values in for L and W

$$P = 2(24) + 2(20)$$

Next, solve the equation by multiplying first then adding

$$P = 48 + 40$$
$$P = 88$$