

Length and ft essay



**ASSIGN
BUSTER**

Chapter 1. 5 Word Problems The product of two consecutive even integers.

1. Find two consecutive even integers whose product is 168 Sides of a Square 2. The length of each side of a square is 3 in. more than the length of each side of a smaller square. The sum of the areas of the squares is 149 in². Find the lengths of the sides of the two squares. Uniform Strip 3. Cynthia Besch wants to buy a rug for a room that is 12 ft wide and 15 ft long. She wants to leave a uniform strip of floor around the rug.

She can afford to buy 108 ft² of carpeting. What dimensions should the rug have? Rectangular piece of metal 4. A rectangular piece of metal is 10 in longer than it is wide. Squares with sides 2 in long are cut from the four corners, and the flaps are folded upward to form an open box. If the volume of the box is 832 in³, what were the original dimensions of the piece of metal? Area/Perimeter 5. A rectangle has an area that is numerically twice its perimeter. If the length is twice the width, what are its dimensions? Tree Pythagorean problem 6.

At a point on the ground 60 ft from the base of a tree, the distance to the top of the tree is 4 ft more than 2 times the height of the tree. Find the height of the tree. Vertical motion 7. An astronaut on the moon throws a baseball upward. The astronaut is 6 ft 6in tall, and the initial velocity of the ball is 30 ft per second. The height of s of the ball in feet is given by the equation $S = -2.7t^2 + 30t + 6.5$ Where t is the number of seconds after the ball was thrown a. After how many seconds is the ball 12 ft above the moon's surface? b.) How many seconds will it take for the ball to return to the surface?