

Applications of Quadratic Equations

1. The product of two consecutive even integers is 48. Find the integers.
2. The width of a rectangle is 5 inches less than 3 times the length. The area is 2 square inches. Find the length and width.
3. The longer leg of a right triangle measures 7 feet more than the shorter leg. The hypotenuse is 8 feet longer than the shorter leg. Find the lengths of the sides of the triangle.
4. Steve and Tammy leave a campground, hiking on two different trails. Steve heads south and Tammy heads east. By lunchtime they are 9 miles apart. Steve walked 3 miles more than twice as many miles as Tammy. Find the distance each person hiked. (Round to the nearest tenth of a mile.)