

Math 2200

Quadratic Equations

Worksheet – Word Problems

1. What are the dimensions of a rectangular tennis court with a perimeter of 110m and an area of 750m^2 ?
2. Find two consecutive positive even numbers that have a product of 48.
3. The legs of a right triangle measure 1cm and 2cm less than the hypotenuse. Find the length of all three sides.
4. The area of a triangle is 9 cm^2 . The base is 3 cm longer than the height. Find the height.
5. The dimensions of a picture frame are 5 x 7in. The area of the picture showing is 24in^2 . What is the width of the frame?
6. A rectangular skating rink measuring 30 m by 20 m is doubled in area by adding a strip at one end of the rink and a strip of the same width along one side of the rink. Find the width of the strips if the enlarged rink is still rectangular.
7. A rectangle is 4 cm longer than twice its width and its area is 96 cm^2 . What are its dimensions?
8. Find two numbers whose sum is 14 and whose product is 45.
9. A chemical plant is rectangular and has a length of 100 m and a width of 60 m. A safety zone of uniform width surrounds the plant. If the area of the safety zone equals the area of the plant, what is the width of the safety zone?