Algebra 2 Number, Consecutive Integer, and Geometry Problems Notes and Assignment

Name:	
Date: _	

Consecutive Integers

Consecutive Even Integers

Consecutive Odd Integers

Ex. 1 Find two consecutive odd integers whose product is 99.

Ex 2 A certain number added to its square is 30. Find the number.

1. The square of a number exceeds the number by 72. Find the number.

2. Find two consecutive positive integers such that the square of the first decreased by 17 is 4 times the second.

Ex. 3 The length of a rectangle is 4 inches more than its width. Find the dimensions of the rectangle if its area is 96 square inches.

Ex. 4 If the measure of one side of a square is increased by 2 cm and the measure of the adjacent side is decreased by 2 cm, the area of the resulting rectangle is $32 \text{ } cm^2$. Find the measure of one side of the square.

Ex. 5 The base of a triangle is 3 cm longer than its height. The area of the triangle is $35 cm^2$. Find the height.

3. The length of a rectangle is three times the width. The area is $108 \ cm^2$. Find the dimensions of the rectangle.

4. A square field has 3 meters added to its length and 2 meters added to its width. The field then has an area of 90 m^2 . Find the length of the original field.

5. The height of a triangle is 5 less than its base. The area of the triangle is $42 in^2$. Find the length of the base and the height.