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

Consecutive Integers
Consecutive Even Integers

Name: $\qquad$
Date: $\qquad$
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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 $32 \mathrm{~cm}^{2}$. 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 $35 \mathrm{~cm}^{2}$. Find the height.
3. The length of a rectangle is three times the width. The area is $108 \mathrm{~cm}^{2}$. 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 $90 \mathrm{~m}^{2}$. 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 $42 \mathrm{in}^{2}$. Find the length of the base and the height.

