

4.2 Factoring Quadratic Equations

Two consecutive integers have a product of 30. Write a quadratic equation in standard form to model this. Then factor and solve to find the 2 integers.

Let x represent the smallest integer.

Then $x+1$ is the larger integer

$$x(x+1) = 30$$

$$x^2 + x - 30 = 0$$

$$(x-5)(x+6) = 0$$

$$x=5 \quad x=-6$$

5 & 6
is one
pair.

-6 & -5
is another
pair.

