

5-3 Factoring Quadratics When $a=1$

I. Factors

→ Numbers or expressions ex: $x=3$
that multiply to something

II. Factoring Quadratics IN STANDARD FORM

$$ax^2 + bx + c$$

★ When $a=1!!!$ ★

Steps 1: Look for numbers that multiply to c and add to b

2) write 'em in here)
(x) (x)

$$ax^2 + bx + c \begin{matrix} \text{multi} \\ \text{add} \end{matrix}$$

ex/ Factor $x^2 - 4x - 21 = (x+3)(x-7)$

$$(3)(-7) = -21 \checkmark$$

$$3 + -7 = -4 \checkmark$$

$$3 \ \& \ -7$$

ex/ Factor $x^2 + 16x + 28$

$$(2)(14)$$

$$2 + 14 = 16 \checkmark \quad (x+2)(x+14)$$

$$2 \ \& \ 14!!!$$