10.3 – Factoring II

SIMPLE TRINOMIALS: $x^2 + bx + c$

1. $x^2 + 15x + 36$

* Factors of 36
  that add to 15.

36

$+12+3 = 15$

$(x+12)(x+3)$

2. $x^2 - 9x + 14$

* Factors of 14
  that add to 9.

14

$-7-2 = 9$

$(x-7)(x-2)$

3. $x^2 + 9x - 22$

* Factors of 22
  that subtract to 9.

22

$+11-2 = 9$

$(x+11)(x-2)$

4. $x^2 - 5x - 14$

* Factors of 14 that
  subtract to 5.

14

$-7+2 = -5$

$(x-7)(x+2)$

* Factors of (c) that (sign of c) to (b).