

Math 115E Activity 14

Chapter 5 Section 1-2

Quadratics

Section 2: Factoring a quadratic expression

Quadratic factoring when $a = 1$:

When factoring, the form $x^2 + bx + c$

can be factored as $(x + m)(x + n)$

with real numbers p and q such that:

they both multiply to c and yet both add to b

Quadratic factoring when $a \neq 1$:

When factoring, the form $ax^2 + bx + c$

can be factored as $(x + m)(x + n)$

with real numbers p and q such that:

they both multiply to $a \cdot c$ and yet both add to b

1. Factor $x^2 + x - 6$

5. Factor $x^2 - 4$

2. Factor $x^2 - x - 6$

6. Factor $x^2 + 2x - 120$

3. Factor $x^2 - 9x + 20$

7. Factor $x^2 + 22x + 120$

4. Factor $x^2 + 7x + 6$

8. Factor $x^2 + 18x + 32$

5. Factor $x^2 - 2x - 80$

9. Factor $x^2 + 26x + 160$

6. Factor $x^2 - 13x + 42$

10. Factor $x^2 + 33x + 200$