

Alg 1 Factoring Polynomials Example Set B

Name: _____

Difference of Squares, Perfect Square Trinomials, Leading Coefficient 2 or 3

Examples: Difference of SquaresMultiply using the FOIL pattern: $(x + 6)(x - 6) =$ $(3x + 5)(3x - 5) =$

What pattern do you see in the factors?

What pattern do you see in the products?

Use this pattern to factor these.

A. $x^2 - 49$

B. $16x^2 - 81$

Now try these-

1. $x^2 - 100$

2. $36x^2 - 1$

3. $25x^2 - 4$

Examples: Perfect Square TrinomialsMultiply using the FOIL pattern: $(x - 5)(x - 5) =$ $(3x + 2)(3x + 2) =$ **Now factor:**

D. $x^2 + 12x + 36$

E. $x^2 - 18x + 81$

F. $25x^2 + 20x + 4$

Now try these-

4. $x^2 - 6x + 9$

5. $16x^2 + 8x + 1$

6. $x^2 + 22x + 121$

Examples: Factoring other trinomials ****

G. $2x^2 + 11x + 12$

H. $3x^2 - 13x - 10$

I. $3x^2 + 13x - 10$

J. $3x^2 + 11x + 10$

Now try these-

1. $2x^2 + 11x + 5$

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

3. $3x^2 - 22x + 35$

Alg 1 Factoring Polynomials Practice Set B
(problems from both days of factoring)

Name:

Factor each expression completely.

1. $3x + 27$

2. $x^2 + 17x + 72$

3. $49x^2 - 36$

4. $9x^2 + 24x + 16$

5. $x^2 - 6x - 40$

6. $20x^3 - 15x$

7. $64x^2 - 1$

8. $x^2 + 2x + 1$

9. $9x^2 + 3x + 6$

10. $100x^2 + 60x + 9$