

Factoring Assignment

Date _____ Period _____

Factor the GCF out of each expression.

1) $16x + 20$

2) $8x^3 + 2x^2$

Factor the trinomial when a=1.

3) $x^2 - 11x + 24$

4) $x^2 - 14x + 40$

5) $x^2 - 13x + 42$

6) $x^2 + x - 20$

Factor the trinomial when a does not equal 1.

7) $2x^2 + 9x - 18$

8) $6x^2 + 10x + 4$

9) $2x^2 - x - 15$

10) $60x^2 + 10x - 20$

Factor using difference of two squares.

11) $25x^2 - 1$

12) $x^2 - 4$

13) $4x^2 - 25$

14) $9x^2 - 25$

Factor the perfect square trinomials.

15) $25x^2 - 10x + 1$

16) $9x^2 + 6x + 1$

17) $16x^2 - 24x + 9$

18) $25x^2 + 20x + 4$

Factoring Assignment

Date _____ Period _____

Factor the GCF out of each expression.

1) $16x + 20$

$4(4x + 5)$

2) $8x^3 + 2x^2$

$2x^2(4x + 1)$

Factor the trinomial when a=1.

3) $x^2 - 11x + 24$

$(x - 8)(x - 3)$

4) $x^2 - 14x + 40$

$(x - 4)(x - 10)$

5) $x^2 - 13x + 42$

$(x - 7)(x - 6)$

6) $x^2 + x - 20$

$(x - 4)(x + 5)$

Factor the trinomial when a does not equal 1.

7) $2x^2 + 9x - 18$

$(2x - 3)(x + 6)$

8) $6x^2 + 10x + 4$

$2(3x + 2)(x + 1)$

9) $2x^2 - x - 15$

$(2x + 5)(x - 3)$

10) $60x^2 + 10x - 20$

$10(2x - 1)(3x + 2)$

Factor using difference of two squares.

11) $25x^2 - 1$

$(5x + 1)(5x - 1)$

12) $x^2 - 4$

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

13) $4x^2 - 25$

$(2x + 5)(2x - 5)$

14) $9x^2 - 25$

$(3x + 5)(3x - 5)$

Factor the perfect square trinomials.

15) $25x^2 - 10x + 1$

$(5x - 1)^2$

16) $9x^2 + 6x + 1$

$(3x + 1)^2$

17) $16x^2 - 24x + 9$

$(4x - 3)^2$

18) $25x^2 + 20x + 4$

$(5x + 2)^2$