

Assignment 9

Factor each of the quadratic expressions

1. $3x^2 - x - 2$

2. $6x^2 + 7x - 3$

3. $16x^2 - 25$

4. $9x^2 + 30x + 25$

Factor by grouping.

5. $2x^3 + 5x^2 + 6x + 15$

6. $x^3 + 7x^2 - 5x - 35$

7. $x^3 - 3x^2 - 2x + 6$

8. $x^3 - 5x^2 + x - 5$

Name _____

Factor completely by factoring twice. First factor the GCF and then factor once again.

1. $8x^2 - 8$

2. $2x^2 - 4x - 30$

3. $x^3 + 5x^2 - 9x - 45$

4. $3x^2 - 9x - 12$

Solve by factoring.

1. $2x^2 + x - 3 = 0$

2. $x^2 + 8x + 7 = 0$

3. $x^2 + 3x - 10 = 0$

4. $x^2 + 10x + 25 = 0$

Expand. Foil and Factor

1. Expand: $(x+5)^2$

2. Factor: $x^2 - 12x + 36$

3. Foil: $(3x-5)(3x+5)$

4. Factor: $25x^2 - 16$

5. Foil: $(2x+5)(3x-1)$

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

7. Foil: $(x-6)(x+5)$

10. Factor: $x^2 - 5x - 14$