

9.3 Factor Trinomials (by grouping)

Algebra 1

Name: _____

CA #1

Factor each trinomial by GROUPING. Some problems may not factor.

1. $5x^2 - x - 4$

2. $-18x^2 - 18x - 4$

3. $4x^2 + 17x + 4$

4. $3x^2 - 1x + 1$

5. $x^2 - 6x - 27$

6. $6x^2 + 13x + 5$

7. $x^2 - 121$

8. $81x^2 - 25$

9. $49x^2 - 9$

Solve each equation by factoring.

10. $4x^2 + 35x = 9$

11. $12x^3 - 16x^2 - 3x = 0$

12. $5x^2 + 7x + 2 = 0$

13. $-10x^2 - 7x = 1$

Answers to 9.3 CA #1

1. $(x - 1)(5x + 4)$	2. $-2(3x + 2)(3x + 1)$	3. $(x + 4)(4x + 1)$	4. Does not factor	5. $(x - 9)(x + 3)$
6. $(3x + 5)(2x + 1)$	7. $(x - 11)(x + 11)$	8. $(9x - 5)(9x + 5)$	9. $(7x - 3)(7x + 3)$	10. $x = -9, \frac{1}{4}$
11. $x = 0, -\frac{1}{6}, \frac{3}{2}$	12. $x = -1, -\frac{2}{5}$	13. $x = -\frac{1}{5}, -\frac{1}{2}$		