

9.5 Factor $x^2 + bx + c$ **9.5 Practice 4 (GCF)**

Name _____

Factor each problem completely.

1. $2x^2 + 12x + 10$

2. $x^2 - 16x + 63$

3. $3x^2 - 3x - 18$

4. $4x^2 - 28x + 48$

5. $2x^2 - 6x - 20$

6. $x^2 + 6x - 16$

7. $2x^2 + 14x + 24$

8. $2x^2 - 6x - 20$

9. $3x^2 - 24x + 21$

10. $5x^2 + 5x - 10$

11. $7x^2 - 21x + 14$

12. $9x^2 + 54x + 72$

13. $8x^2 + 24x - 224$

14. $10a^2 + 180a + 810$

15. $4c^2 - 60c + 224$

Solve the following polynomial equations by factoring.

16. $x^2 + 6x - 27 = 0$

17. $3x^2 - 18x = 48$

18. $4x^2 + 20x = -24$

19. $-7x^2 + 21x + 28 = 0$

20. $c^2 - 3c = 4$

21. $2x^2 + 6x = 56$

22. $15x^2 + 15x = 30$

23. $7x(x - 3) = -14$

24. $9x^2 - 27x = -18$

25. $8x^2 + 8x = 16$