Factoring Quadratic Expressions (A)

Name:_____

Factor each expression.

1. $3x^2 - 9x - 162$

2. $-4x^2 + 40x - 96$

3. $-5x^2 + 15x + 270$

4. $3x^2 + 6x - 24$

5. $-4x^2 + 32x - 28$

6. $-3x^2 + 18x - 24$

7. $2x^2 + 16x + 24$

8. $3x^2 - 48$

9. $-5x^2 - 40x - 75$

10. $-4x^2 + 56x - 192$

11. $4x^2 - 4x - 224$

12. $5x^2 - 30x - 35$

13. $5x^2 - 60x + 135$

14. $2x^2 + 24x + 54$

15. $3x^2 + 30x + 63$

16. $3x^2 + 54x + 243$

17. $4x^2 + 52x + 160$

18. $-4x^2 - 16x + 180$

19. $5x^2 - 85x + 360$

20. $3x^2 - 21x + 30$

Factoring Quadratic Expressions (A) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 9x - 162$

   $3(x + 6)(x - 9)$

2. $-4x^2 + 40x - 96$

   $-4(x - 4)(x - 6)$

3. $-5x^2 + 15x + 270$

   $-5(x + 6)(x - 9)$

4. $3x^2 + 6x - 24$

   $3(x + 4)(x - 2)$

5. $-4x^2 + 32x - 28$

   $-4(x - 1)(x - 7)$

6. $-3x^2 + 18x - 24$

   $-3(x - 2)(x - 4)$

7. $2x^2 + 16x + 24$

   $2(x + 2)(x + 6)$

8. $3x^2 - 48$

   $3(x - 4)(x + 4)$

9. $-5x^2 - 40x - 75$

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

10. $-4x^2 + 56x - 192$

    $-4(x - 8)(x - 6)$

11. $4x^2 - 4x - 224$

    $4(x + 7)(x - 8)$

12. $5x^2 - 30x - 35$

    $5(x - 7)(x + 1)$

13. $5x^2 - 60x + 135$

    $5(x - 9)(x - 3)$

14. $2x^2 + 24x + 54$

    $2(x + 9)(x + 3)$

15. $3x^2 + 30x + 63$

    $3(x + 7)(x + 3)$

16. $3x^2 + 54x + 243$

    $3(x + 9)(x + 9) = 3(x + 9)^2$

17. $4x^2 + 52x + 160$

    $4(x + 8)(x + 5)$

18. $-4x^2 - 16x + 180$

    $-4(x + 9)(x - 5)$

19. $5x^2 - 85x + 360$

    $5(x - 8)(x - 9)$

20. $3x^2 - 21x + 30$

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