

Factoring Quadratic Expressions (A)

Name: _____

Date: _____

Factor each expression.

1. $-4x^2 + 32x - 48$

11. $-16x^2 + 100$

2. $12x^2 - 28x + 8$

12. $-10x^2 - 5x + 180$

3. $2x^2 - 4x - 96$

13. $-15x^2 - 84x + 36$

4. $4x^2 + 26x + 30$

14. $20x^2 - 85x + 20$

5. $-8x^2 - 56x - 98$

15. $12x^2 - 51x - 126$

6. $-8x^2 + 68x - 32$

16. $5x^2 - 15x + 10$

7. $-12x^2 - 93x + 135$

17. $4x^2 + 40x + 100$

8. $-25x^2 - 110x - 40$

18. $25x^2 + 165x - 280$

9. $-8x^2 - 8x + 70$

19. $12x^2 - 57x - 90$

10. $16x^2 - 20x - 36$

20. $-15x^2 - 78x - 15$

Factoring Quadratic Expressions (A) Answers

Name: _____

Date: _____

Factor each expression.

1. $-4x^2 + 32x - 48$

$-4(x - 2)(x - 6)$

2. $12x^2 - 28x + 8$

$4(3x - 1)(x - 2)$

3. $2x^2 - 4x - 96$

$2(x - 8)(x + 6)$

4. $4x^2 + 26x + 30$

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

5. $-8x^2 - 56x - 98$

$-2(2x + 7)(2x + 7) = -2(2x + 7)^2$

6. $-8x^2 + 68x - 32$

$-4(x - 8)(2x - 1)$

7. $-12x^2 - 93x + 135$

$-3(x + 9)(4x - 5)$

8. $-25x^2 - 110x - 40$

$-5(x + 4)(5x + 2)$

9. $-8x^2 - 8x + 70$

$-2(2x + 7)(2x - 5)$

10. $16x^2 - 20x - 36$

$4(x + 1)(4x - 9)$

11. $-16x^2 + 100$

$-4(2x - 5)(2x + 5)$

12. $-10x^2 - 5x + 180$

$-5(2x + 9)(x - 4)$

13. $-15x^2 - 84x + 36$

$-3(x + 6)(5x - 2)$

14. $20x^2 - 85x + 20$

$5(4x - 1)(x - 4)$

15. $12x^2 - 51x - 126$

$3(x - 6)(4x + 7)$

16. $5x^2 - 15x + 10$

$5(x - 1)(x - 2)$

17. $4x^2 + 40x + 100$

$4(x + 5)(x + 5) = 4(x + 5)^2$

18. $25x^2 + 165x - 280$

$5(5x - 7)(x + 8)$

19. $12x^2 - 57x - 90$

$3(x - 6)(4x + 5)$

20. $-15x^2 - 78x - 15$

$-3(x + 5)(5x + 1)$

Factoring Quadratic Expressions (B)

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 52x + 84$

11. $-3x^2 - 15x + 108$

2. $-20x^2 + 168x - 196$

12. $20x^2 + 45x + 10$

3. $-4x^2 - 26x + 90$

13. $-8x^2 + 6x + 2$

4. $-12x^2 + 69x + 216$

14. $3x^2 - 12x + 12$

5. $-8x^2 + 74x - 80$

15. $6x^2 - 40x + 50$

6. $16x^2 + 64x + 60$

16. $-2x^2 + 26x - 80$

7. $9x^2 + 39x + 42$

17. $-16x^2 - 180x - 324$

8. $-10x^2 - 52x + 126$

18. $10x^2 - 25x - 125$

9. $25x^2 - 115x + 60$

19. $8x^2 - 54x + 36$

10. $-20x^2 - 148x + 96$

20. $-5x^2 + 20$

Factoring Quadratic Expressions (B) Answers

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 52x + 84$

$4(x - 3)(2x - 7)$

2. $-20x^2 + 168x - 196$

$-4(x - 7)(5x - 7)$

3. $-4x^2 - 26x + 90$

$-2(x + 9)(2x - 5)$

4. $-12x^2 + 69x + 216$

$-3(4x + 9)(x - 8)$

5. $-8x^2 + 74x - 80$

$-2(4x - 5)(x - 8)$

6. $16x^2 + 64x + 60$

$4(2x + 5)(2x + 3)$

7. $9x^2 + 39x + 42$

$3(x + 2)(3x + 7)$

8. $-10x^2 - 52x + 126$

$-2(x + 7)(5x - 9)$

9. $25x^2 - 115x + 60$

$5(5x - 3)(x - 4)$

10. $-20x^2 - 148x + 96$

$-4(5x - 3)(x + 8)$

11. $-3x^2 - 15x + 108$

$-3(x - 4)(x + 9)$

12. $20x^2 + 45x + 10$

$5(4x + 1)(x + 2)$

13. $-8x^2 + 6x + 2$

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

14. $3x^2 - 12x + 12$

$3(x - 2)(x - 2) = 3(x - 2)^2$

15. $6x^2 - 40x + 50$

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

16. $-2x^2 + 26x - 80$

$-2(x - 8)(x - 5)$

17. $-16x^2 - 180x - 324$

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

18. $10x^2 - 25x - 125$

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

19. $8x^2 - 54x + 36$

$2(4x - 3)(x - 6)$

20. $-5x^2 + 20$

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

Factoring Quadratic Expressions (C)

Name: _____

Date: _____

Factor each expression.

1. $-20x^2 - 84x + 216$

11. $-6x^2 - 75x - 189$

2. $9x^2 - 87x + 54$

12. $-15x^2 - 50x - 35$

3. $10x^2 + 54x + 20$

13. $-20x^2 + 48x + 128$

4. $-4x^2 - 22x + 42$

14. $8x^2 - 16x + 6$

5. $12x^2 + 48x + 45$

15. $3x^2 - 15x - 18$

6. $-8x^2 + 26x - 6$

16. $16x^2 - 36$

7. $6x^2 + 50x - 36$

17. $25x^2 + 160x - 320$

8. $-4x^2 + 10x + 50$

18. $6x^2 + 57x + 27$

9. $-10x^2 + 12x - 2$

19. $12x^2 - 111x + 189$

10. $8x^2 + 90x + 162$

20. $-4x^2 + 18x - 14$

Factoring Quadratic Expressions (C) Answers

Name: _____

Date: _____

Factor each expression.

1. $-20x^2 - 84x + 216$

$-4(5x - 9)(x + 6)$

2. $9x^2 - 87x + 54$

$3(3x - 2)(x - 9)$

3. $10x^2 + 54x + 20$

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

4. $-4x^2 - 22x + 42$

$-2(x + 7)(2x - 3)$

5. $12x^2 + 48x + 45$

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

6. $-8x^2 + 26x - 6$

$-2(x - 3)(4x - 1)$

7. $6x^2 + 50x - 36$

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

8. $-4x^2 + 10x + 50$

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

9. $-10x^2 + 12x - 2$

$-2(x - 1)(5x - 1)$

10. $8x^2 + 90x + 162$

$2(x + 9)(4x + 9)$

11. $-6x^2 - 75x - 189$

$-3(2x + 7)(x + 9)$

12. $-15x^2 - 50x - 35$

$-5(3x + 7)(x + 1)$

13. $-20x^2 + 48x + 128$

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

14. $8x^2 - 16x + 6$

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

15. $3x^2 - 15x - 18$

$3(x - 6)(x + 1)$

16. $16x^2 - 36$

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

17. $25x^2 + 160x - 320$

$5(5x - 8)(x + 8)$

18. $6x^2 + 57x + 27$

$3(2x + 1)(x + 9)$

19. $12x^2 - 111x + 189$

$3(4x - 9)(x - 7)$

20. $-4x^2 + 18x - 14$

$-2(2x - 7)(x - 1)$

Factoring Quadratic Expressions (D)

Name: _____

Date: _____

Factor each expression.

1. $-20x^2 - 152x + 252$

11. $-12x^2 + 100x + 72$

2. $4x^2 - 18x - 162$

12. $-12x^2 + 57x + 15$

3. $6x^2 - 9x + 3$

13. $-16x^2 - 64x + 36$

4. $10x^2 - 35x + 15$

14. $8x^2 + 30x + 18$

5. $15x^2 + 147x + 108$

15. $-20x^2 - 104x + 252$

6. $8x^2 - 40x + 50$

16. $-20x^2 - 225x - 405$

7. $10x^2 - 25x - 60$

17. $12x^2 + 12x - 45$

8. $-12x^2 - 63x - 81$

18. $-20x^2 + 44x + 48$

9. $-16x^2 + 32x - 12$

19. $20x^2 + 45x - 45$

10. $10x^2 - 115x + 280$

20. $8x^2 - 28x - 60$

Factoring Quadratic Expressions (D) Answers

Name: _____

Date: _____

Factor each expression.

1. $-20x^2 - 152x + 252$

$-4(x + 9)(5x - 7)$

2. $4x^2 - 18x - 162$

$2(2x + 9)(x - 9)$

3. $6x^2 - 9x + 3$

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

4. $10x^2 - 35x + 15$

$5(x - 3)(2x - 1)$

5. $15x^2 + 147x + 108$

$3(x + 9)(5x + 4)$

6. $8x^2 - 40x + 50$

$2(2x - 5)(2x - 5) = 2(2x - 5)^2$

7. $10x^2 - 25x - 60$

$5(2x + 3)(x - 4)$

8. $-12x^2 - 63x - 81$

$-3(x + 3)(4x + 9)$

9. $-16x^2 + 32x - 12$

$-4(2x - 3)(2x - 1)$

10. $10x^2 - 115x + 280$

$5(2x - 7)(x - 8)$

11. $-12x^2 + 100x + 72$

$-4(x - 9)(3x + 2)$

12. $-12x^2 + 57x + 15$

$-3(x - 5)(4x + 1)$

13. $-16x^2 - 64x + 36$

$-4(2x - 1)(2x + 9)$

14. $8x^2 + 30x + 18$

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

15. $-20x^2 - 104x + 252$

$-4(5x - 9)(x + 7)$

16. $-20x^2 - 225x - 405$

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

17. $12x^2 + 12x - 45$

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

18. $-20x^2 + 44x + 48$

$-4(x - 3)(5x + 4)$

19. $20x^2 + 45x - 45$

$5(x + 3)(4x - 3)$

20. $8x^2 - 28x - 60$

$4(x - 5)(2x + 3)$

Factoring Quadratic Expressions (E)

Name: _____

Date: _____

Factor each expression.

1. $-4x^2 + 22x - 24$

11. $-8x^2 - 28x - 20$

2. $-3x^2 + 33x - 84$

12. $-8x^2 + 30x + 8$

3. $-4x^2 - 14x + 18$

13. $16x^2 + 4x - 20$

4. $-8x^2 - 20x + 72$

14. $10x^2 + 76x + 96$

5. $16x^2 - 48x - 28$

15. $16x^2 - 148x + 160$

6. $-9x^2 + 15x + 36$

16. $16x^2 + 52x - 140$

7. $2x^2 + 10x - 48$

17. $4x^2 - 34x - 18$

8. $-12x^2 - 44x + 80$

18. $4x^2 + 18x - 162$

9. $-10x^2 - 105x - 200$

19. $-8x^2 + 76x - 180$

10. $-6x^2 + 52x - 96$

20. $6x^2 + 57x + 135$

Factoring Quadratic Expressions (E) Answers

Name: _____

Date: _____

Factor each expression.

1. $-4x^2 + 22x - 24$

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

2. $-3x^2 + 33x - 84$

$-3(x - 7)(x - 4)$

3. $-4x^2 - 14x + 18$

$-2(2x + 9)(x - 1)$

4. $-8x^2 - 20x + 72$

$-4(2x + 9)(x - 2)$

5. $16x^2 - 48x - 28$

$4(2x - 7)(2x + 1)$

6. $-9x^2 + 15x + 36$

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

7. $2x^2 + 10x - 48$

$2(x - 3)(x + 8)$

8. $-12x^2 - 44x + 80$

$-4(3x - 4)(x + 5)$

9. $-10x^2 - 105x - 200$

$-5(2x + 5)(x + 8)$

10. $-6x^2 + 52x - 96$

$-2(3x - 8)(x - 6)$

11. $-8x^2 - 28x - 20$

$-4(x + 1)(2x + 5)$

12. $-8x^2 + 30x + 8$

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

13. $16x^2 + 4x - 20$

$4(x - 1)(4x + 5)$

14. $10x^2 + 76x + 96$

$2(x + 6)(5x + 8)$

15. $16x^2 - 148x + 160$

$4(x - 8)(4x - 5)$

16. $16x^2 + 52x - 140$

$4(x + 5)(4x - 7)$

17. $4x^2 - 34x - 18$

$2(x - 9)(2x + 1)$

18. $4x^2 + 18x - 162$

$2(2x - 9)(x + 9)$

19. $-8x^2 + 76x - 180$

$-4(x - 5)(2x - 9)$

20. $6x^2 + 57x + 135$

$3(2x + 9)(x + 5)$

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

1. $-10x^2 + 45x + 90$

11. $-25x^2 - 115x + 210$

2. $-15x^2 - 20x + 35$

12. $-8x^2 + 24x + 14$

3. $12x^2 - 96x + 189$

13. $-12x^2 + 39x + 105$

4. $-20x^2 - 105x - 135$

14. $-20x^2 + 5x + 25$

5. $6x^2 - 3x - 30$

15. $-12x^2 + 24x + 135$

6. $15x^2 + 145x + 200$

16. $-6x^2 + 3x + 84$

7. $6x^2 - 45x + 75$

17. $12x^2 - 81x - 243$

8. $20x^2 + 112x + 128$

18. $-25x^2 + 165x + 70$

9. $-16x^2 + 324$

19. $6x^2 - 64x + 128$

10. $15x^2 - 10x - 40$

20. $20x^2 - 25x - 30$

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

1. $-10x^2 + 45x + 90$

$-5(2x + 3)(x - 6)$

2. $-15x^2 - 20x + 35$

$-5(3x + 7)(x - 1)$

3. $12x^2 - 96x + 189$

$3(2x - 9)(2x - 7)$

4. $-20x^2 - 105x - 135$

$-5(x + 3)(4x + 9)$

5. $6x^2 - 3x - 30$

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

6. $15x^2 + 145x + 200$

$5(3x + 5)(x + 8)$

7. $6x^2 - 45x + 75$

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

8. $20x^2 + 112x + 128$

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

9. $-16x^2 + 324$

$-4(2x - 9)(2x + 9)$

10. $15x^2 - 10x - 40$

$5(3x + 4)(x - 2)$

11. $-25x^2 - 115x + 210$

$-5(5x - 7)(x + 6)$

12. $-8x^2 + 24x + 14$

$-2(2x - 7)(2x + 1)$

13. $-12x^2 + 39x + 105$

$-3(4x + 7)(x - 5)$

14. $-20x^2 + 5x + 25$

$-5(x + 1)(4x - 5)$

15. $-12x^2 + 24x + 135$

$-3(2x + 5)(2x - 9)$

16. $-6x^2 + 3x + 84$

$-3(2x + 7)(x - 4)$

17. $12x^2 - 81x - 243$

$3(4x + 9)(x - 9)$

18. $-25x^2 + 165x + 70$

$-5(5x + 2)(x - 7)$

19. $6x^2 - 64x + 128$

$2(x - 8)(3x - 8)$

20. $20x^2 - 25x - 30$

$5(x - 2)(4x + 3)$

Factoring Quadratic Expressions (G)

Name: _____

Date: _____

Factor each expression.

1. $10x^2 + 25x - 125$

11. $-12x^2 + 20x + 48$

2. $-9x^2 + 42x - 24$

12. $-10x^2 + 24x + 18$

3. $-6x^2 + 52x - 96$

13. $-5x^2 - 45x - 100$

4. $10x^2 - 68x + 90$

14. $-8x^2 - 8x + 6$

5. $15x^2 + 63x - 60$

15. $-3x^2 - 24x - 21$

6. $6x^2 + 3x - 9$

16. $-20x^2 + 148x - 56$

7. $20x^2 - 45x - 45$

17. $15x^2 + 55x - 20$

8. $-15x^2 + 35x - 20$

18. $12x^2 - 63x - 147$

9. $10x^2 + 66x + 80$

19. $-15x^2 + 155x - 180$

10. $6x^2 + 57x + 135$

20. $-4x^2 - 10x - 4$

Factoring Quadratic Expressions (G) Answers

Name: _____

Date: _____

Factor each expression.

1. $10x^2 + 25x - 125$

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

2. $-9x^2 + 42x - 24$

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

3. $-6x^2 + 52x - 96$

$-2(3x - 8)(x - 6)$

4. $10x^2 - 68x + 90$

$2(5x - 9)(x - 5)$

5. $15x^2 + 63x - 60$

$3(5x - 4)(x + 5)$

6. $6x^2 + 3x - 9$

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

7. $20x^2 - 45x - 45$

$5(4x + 3)(x - 3)$

8. $-15x^2 + 35x - 20$

$-5(3x - 4)(x - 1)$

9. $10x^2 + 66x + 80$

$2(x + 5)(5x + 8)$

10. $6x^2 + 57x + 135$

$3(2x + 9)(x + 5)$

11. $-12x^2 + 20x + 48$

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

12. $-10x^2 + 24x + 18$

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

13. $-5x^2 - 45x - 100$

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

14. $-8x^2 - 8x + 6$

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

15. $-3x^2 - 24x - 21$

$-3(x + 7)(x + 1)$

16. $-20x^2 + 148x - 56$

$-4(5x - 2)(x - 7)$

17. $15x^2 + 55x - 20$

$5(3x - 1)(x + 4)$

18. $12x^2 - 63x - 147$

$3(x - 7)(4x + 7)$

19. $-15x^2 + 155x - 180$

$-5(3x - 4)(x - 9)$

20. $-4x^2 - 10x - 4$

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

Factoring Quadratic Expressions (H)

Name: _____

Date: _____

Factor each expression.

1. $6x^2 - 28x + 32$

11. $-4x^2 + 50x - 126$

2. $-8x^2 + 38x - 24$

12. $20x^2 - 40x - 25$

3. $10x^2 - 4x - 32$

13. $-16x^2 - 16x + 252$

4. $-12x^2 - 12x + 45$

14. $-20x^2 - 104x - 96$

5. $-9x^2 + 42x + 72$

15. $12x^2 + 39x - 36$

6. $-2x^2 - 16x - 24$

16. $10x^2 + 84x + 32$

7. $4x^2 + 22x - 126$

17. $15x^2 + 66x + 63$

8. $20x^2 - 12x - 56$

18. $9x^2 - 51x - 84$

9. $15x^2 - 108x + 108$

19. $-15x^2 - 55x + 20$

10. $-8x^2 - 60x - 112$

20. $-12x^2 - 105x + 27$

Factoring Quadratic Expressions (H) Answers

Name: _____

Date: _____

Factor each expression.

1. $6x^2 - 28x + 32$

$2(3x - 8)(x - 2)$

2. $-8x^2 + 38x - 24$

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

3. $10x^2 - 4x - 32$

$2(x - 2)(5x + 8)$

4. $-12x^2 - 12x + 45$

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

5. $-9x^2 + 42x + 72$

$-3(3x + 4)(x - 6)$

6. $-2x^2 - 16x - 24$

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

7. $4x^2 + 22x - 126$

$2(x + 9)(2x - 7)$

8. $20x^2 - 12x - 56$

$4(x - 2)(5x + 7)$

9. $15x^2 - 108x + 108$

$3(5x - 6)(x - 6)$

10. $-8x^2 - 60x - 112$

$-4(x + 4)(2x + 7)$

11. $-4x^2 + 50x - 126$

$-2(2x - 7)(x - 9)$

12. $20x^2 - 40x - 25$

$5(2x - 5)(2x + 1)$

13. $-16x^2 - 16x + 252$

$-4(2x + 9)(2x - 7)$

14. $-20x^2 - 104x - 96$

$-4(x + 4)(5x + 6)$

15. $12x^2 + 39x - 36$

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

16. $10x^2 + 84x + 32$

$2(5x + 2)(x + 8)$

17. $15x^2 + 66x + 63$

$3(5x + 7)(x + 3)$

18. $9x^2 - 51x - 84$

$3(x - 7)(3x + 4)$

19. $-15x^2 - 55x + 20$

$-5(3x - 1)(x + 4)$

20. $-12x^2 - 105x + 27$

$-3(4x - 1)(x + 9)$

Factoring Quadratic Expressions (I)

Name: _____

Date: _____

Factor each expression.

1. $8x^2 + 48x + 54$

11. $10x^2 - 92x + 96$

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

12. $10x^2 + 36x - 70$

3. $-16x^2 - 48x + 28$

13. $-9x^2 - 93x - 168$

4. $12x^2 - 28x - 24$

14. $4x^2 + 2x - 56$

5. $10x^2 + 25x - 15$

15. $20x^2 + 64x + 48$

6. $-16x^2 - 148x - 36$

16. $10x^2 - 34x + 28$

7. $20x^2 + 55x - 100$

17. $4x^2 + 2x - 90$

8. $-20x^2 + 140x - 225$

18. $25x^2 + 120x - 180$

9. $15x^2 - 80x + 80$

19. $6x^2 - 3x - 3$

10. $-12x^2 + 33x - 18$

20. $20x^2 - 75x - 125$

Factoring Quadratic Expressions (I) Answers

Name: _____

Date: _____

Factor each expression.

1. $8x^2 + 48x + 54$

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

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

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

3. $-16x^2 - 48x + 28$

$-4(2x + 7)(2x - 1)$

4. $12x^2 - 28x - 24$

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

5. $10x^2 + 25x - 15$

$5(2x - 1)(x + 3)$

6. $-16x^2 - 148x - 36$

$-4(4x + 1)(x + 9)$

7. $20x^2 + 55x - 100$

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

8. $-20x^2 + 140x - 225$

$-5(2x - 5)(2x - 9)$

9. $15x^2 - 80x + 80$

$5(3x - 4)(x - 4)$

10. $-12x^2 + 33x - 18$

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

11. $10x^2 - 92x + 96$

$2(5x - 6)(x - 8)$

12. $10x^2 + 36x - 70$

$2(5x - 7)(x + 5)$

13. $-9x^2 - 93x - 168$

$-3(x + 8)(3x + 7)$

14. $4x^2 + 2x - 56$

$2(x + 4)(2x - 7)$

15. $20x^2 + 64x + 48$

$4(5x + 6)(x + 2)$

16. $10x^2 - 34x + 28$

$2(x - 2)(5x - 7)$

17. $4x^2 + 2x - 90$

$2(x + 5)(2x - 9)$

18. $25x^2 + 120x - 180$

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

19. $6x^2 - 3x - 3$

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

20. $20x^2 - 75x - 125$

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

Factoring Quadratic Expressions (J)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 30x + 54$

11. $-10x^2 - 35x - 30$

2. $-25x^2 + 130x + 120$

12. $6x^2 - 57x + 126$

3. $-10x^2 - 105x - 245$

13. $16x^2 + 68x + 72$

4. $4x^2 + 42x + 98$

14. $-12x^2 + 40x - 28$

5. $4x^2 - 54x + 162$

15. $-15x^2 + 145x - 200$

6. $-12x^2 - 104x + 36$

16. $8x^2 - 28x - 60$

7. $4x^2 + 4x - 224$

17. $-25x^2 - 115x - 60$

8. $10x^2 + 25x - 125$

18. $16x^2 + 108x - 28$

9. $-20x^2 - 152x - 84$

19. $4x^2 + 30x + 54$

10. $15x^2 + 96x + 105$

20. $-6x^2 - 56x - 98$

Factoring Quadratic Expressions (J) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 30x + 54$

$2(2x - 9)(x - 3)$

2. $-25x^2 + 130x + 120$

$-5(5x + 4)(x - 6)$

3. $-10x^2 - 105x - 245$

$-5(2x + 7)(x + 7)$

4. $4x^2 + 42x + 98$

$2(2x + 7)(x + 7)$

5. $4x^2 - 54x + 162$

$2(2x - 9)(x - 9)$

6. $-12x^2 - 104x + 36$

$-4(x + 9)(3x - 1)$

7. $4x^2 + 4x - 224$

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

8. $10x^2 + 25x - 125$

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

9. $-20x^2 - 152x - 84$

$-4(5x + 3)(x + 7)$

10. $15x^2 + 96x + 105$

$3(5x + 7)(x + 5)$

11. $-10x^2 - 35x - 30$

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

12. $6x^2 - 57x + 126$

$3(x - 6)(2x - 7)$

13. $16x^2 + 68x + 72$

$4(x + 2)(4x + 9)$

14. $-12x^2 + 40x - 28$

$-4(3x - 7)(x - 1)$

15. $-15x^2 + 145x - 200$

$-5(x - 8)(3x - 5)$

16. $8x^2 - 28x - 60$

$4(x - 5)(2x + 3)$

17. $-25x^2 - 115x - 60$

$-5(x + 4)(5x + 3)$

18. $16x^2 + 108x - 28$

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

19. $4x^2 + 30x + 54$

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

20. $-6x^2 - 56x - 98$

$-2(3x + 7)(x + 7)$