Multiplying Factors (A)

Find the product of each pair of factors.

1. $(-x - 7)(x + 7)$
2. $(-x + 3)(x + 3)$
3. $(x - 7)(x - 5)$
4. $(-x + 1)(-x - 4)$
5. $(x - 1)(-x + 4)$
6. $(-x + 8)(x - 3)$
7. $(x + 9)(x + 3)$
8. $(-x - 1)(-x - 4)$
9. $(-x - 1)(x + 8)$
10. $(-x - 7)(x + 7)$
11. $(x + 4)(x + 8)$
12. $(-x + 4)(x - 5)$
13. $(x + 9)(x - 2)$
14. $(-x - 2)(-x + 7)$
15. $(-x - 2)(-x - 8)$
16. $(x + 1)(x + 1)$
17. $(-x + 1)(x + 4)$
18. $(x + 5)(-x + 8)$
19. $(-x - 7)(-x + 7)$
20. $(-x - 1)(-x + 8)$

Multiplying Factors (A) Answers

Find the product of each pair of factors.

1. $(-x - 7)(x + 7)$
   $-x^2 - 14x - 49$

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

3. $(x - 7)(x - 5)$
   $x^2 - 12x + 35$

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

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

6. $(-x + 8)(x - 3)$
   $-x^2 + 11x - 24$

7. $(x + 9)(x + 3)$
   $x^2 + 12x + 27$

8. $(-x - 1)(-x - 4)$
   $x^2 + 5x + 4$

9. $(-x - 1)(x + 8)$
   $-x^2 - 9x - 8$

10. $(-x - 7)(x + 7)$
    $-x^2 - 14x - 49$

11. $(x + 4)(x + 8)$
    $x^2 + 12x + 32$

12. $(-x + 4)(x - 5)$
    $-x^2 + 9x - 20$

13. $(x + 9)(x - 2)$
    $x^2 + 7x - 18$

14. $(-x - 2)(-x + 7)$
    $x^2 - 5x - 14$

15. $(-x - 2)(-x - 8)$
    $x^2 + 10x + 16$

16. $(x + 1)(x + 1)$
    $x^2 + 2x + 1$

17. $(-x + 1)(x + 4)$
    $-x^2 - 3x + 4$

18. $(x + 5)(-x + 8)$
    $-x^2 + 3x + 40$

19. $(-x - 7)(-x + 7)$
    $x^2 - 49$

20. $(-x - 1)(-x + 8)$
    $x^2 - 7x - 8$

Multiplying Factors (B)

Find the product of each pair of factors.

1. $(x - 3)(-x - 7)$
2. $(x - 5)(x + 8)$
3. $(x - 5)(-x - 8)$
4. $(-x - 4)(x + 3)$
5. $(-x + 9)(-x - 1)$
6. $(-x - 3)(x + 2)$
7. $(-x - 6)(x + 1)$
8. $(x + 5)(-x + 9)$
9. $(-x - 1)(-x - 9)$
10. $(-x + 6)(x - 4)$
11. $(-x - 3)(x - 4)$
12. $(-x - 3)(x - 1)$
13. $(-x + 1)(x + 9)$
14. $(x + 4)(x - 2)$
15. $(-x - 7)(-x + 8)$
16. $(-x - 1)(-x + 9)$
17. $(x - 5)(-x + 8)$
18. $(x - 7)(-x + 8)$
19. $(x - 8)(-x + 6)$
20. $(x + 4)(-x - 3)$

Multiplying Factors (B) Answers

Find the product of each pair of factors.

1. $(x - 3)(-x - 7)$
   $-x^2 - 4x + 21$

2. $(x - 5)(x + 8)$
   $x^2 + 3x - 40$

3. $(x - 5)(-x - 8)$
   $-x^2 - 3x + 40$

4. $(-x - 4)(x + 3)$
   $-x^2 - 7x - 12$

5. $(-x + 9)(-x - 1)$
   $x^2 - 8x - 9$

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

7. $(-x - 6)(x + 1)$
   $-x^2 - 7x - 6$

8. $(x + 5)(-x + 9)$
   $-x^2 + 4x + 45$

9. $(-x - 1)(-x - 9)$
   $x^2 + 10x + 9$

10. $(-x + 6)(x - 4)$
    $-x^2 + 10x - 24$

11. $(-x - 3)(x - 4)$
    $-x^2 + x + 12$

12. $(-x - 3)(x - 1)$
    $-x^2 - 2x + 3$

13. $(-x + 1)(x + 9)$
    $-x^2 - 8x + 9$

14. $(x + 4)(x - 2)$
    $x^2 + 2x - 8$

15. $(-x - 7)(-x + 8)$
    $x^2 - x - 56$

16. $(-x - 1)(-x + 9)$
    $x^2 - 8x - 9$

17. $(x - 5)(-x + 8)$
    $-x^2 + 13x - 40$

18. $(x - 7)(-x + 8)$
    $-x^2 + 15x - 56$

19. $(x - 8)(-x + 6)$
    $-x^2 + 14x - 48$

20. $(x + 4)(-x - 3)$
    $-x^2 - 7x - 12$

Multiplying Factors (C)

Find the product of each pair of factors.

1. $(x + 2)(-x + 8)$
2. $(-x - 9)(x + 3)$
3. $(x + 8)(-x + 4)$
4. $(x - 6)(x - 7)$
5. $(x - 4)(-x - 7)$
6. $(x + 5)(x + 6)$
7. $(-x - 6)(x + 1)$
8. $(x + 7)(-x + 4)$
9. $(x - 6)(x + 2)$
10. $(-x - 4)(x + 9)$
11. $(x + 2)(-x + 6)$
12. $(-x + 3)(-x - 8)$
13. $(-x - 9)(x - 4)$
14. $(-x + 1)(x - 7)$
15. $(-x + 2)(x - 9)$
16. $(-x - 7)(-x + 5)$
17. $(x - 3)(-x + 1)$
18. $(-x - 5)(-x - 8)$
19. $(x - 5)(-x - 7)$
20. $(-x + 9)(x - 3)$

Multiplying Factors (C) Answers

Find the product of each pair of factors.

1. $(x + 2)(-x + 8)$
   $-x^2 + 6x + 16$

2. $(-x - 9)(x + 3)$
   $-x^2 - 12x - 27$

3. $(x + 8)(-x + 4)$
   $-x^2 - 4x + 32$

4. $(x - 6)(x - 7)$
   $x^2 - 13x + 42$

5. $(x - 4)(-x - 7)$
   $-x^2 - 3x + 28$

6. $(x + 5)(x + 6)$
   $x^2 + 11x + 30$

7. $(-x - 6)(x + 1)$
   $-x^2 - 7x - 6$

8. $(x + 7)(-x + 4)$
   $-x^2 - 3x + 28$

9. $(x - 6)(x + 2)$
   $x^2 - 4x - 12$

10. $(-x - 4)(x + 9)$
    $-x^2 - 13x - 36$

11. $(x + 2)(-x + 6)$
    $-x^2 + 4x + 12$

12. $(-x + 3)(-x - 8)$
    $x^2 + 5x - 24$

13. $(-x - 9)(x - 4)$
    $-x^2 - 5x + 36$

14. $(-x + 1)(x - 7)$
    $-x^2 + 8x - 7$

15. $(-x + 2)(x - 9)$
    $-x^2 + 11x - 18$

16. $(-x - 7)(-x + 5)$
    $x^2 + 2x - 35$

17. $(x - 3)(-x + 1)$
    $-x^2 + 4x - 3$

18. $(-x - 5)(-x - 8)$
    $x^2 + 13x + 40$

19. $(x - 5)(-x - 7)$
    $-x^2 - 2x + 35$

20. $(-x + 9)(x - 3)$
    $-x^2 + 12x - 27$

Multiplying Factors (D)

Find the product of each pair of factors.

1. $(x - 1)(x - 1)$
2. $(-x + 9)(-x - 9)$
3. $(-x - 9)(-x - 2)$
4. $(x + 8)(-x + 6)$
5. $(-x - 4)(x - 2)$
6. $(x - 8)(x + 2)$
7. $(-x - 9)(-x + 1)$
8. $(x + 2)(x - 2)$
9. $(-x - 5)(-x + 8)$
10. $(-x - 7)(x + 9)$
11. $(-x - 7)(-x + 4)$
12. $(-x - 7)(-x + 4)$
13. $(x - 8)(-x - 8)$
14. $(-x + 2)(x - 1)$
15. $(-x - 8)(-x - 9)$
16. $(x + 5)(-x + 2)$
17. $(-x + 7)(-x + 3)$
18. $(-x + 7)(x + 1)$
19. $(x + 4)(x - 9)$
20. $(x + 5)(x - 1)$

Multiplying Factors (D) Answers

Find the product of each pair of factors.

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

2. $(-x + 9)(-x - 9)$
   $x^2 - 81$

3. $(-x - 9)(-x - 2)$
   $x^2 + 11x + 18$

4. $(x + 8)(-x + 6)$
   $-x^2 - 2x + 48$

5. $(-x - 4)(x - 2)$
   $-x^2 - 2x + 8$

6. $(x - 8)(x + 2)$
   $x^2 - 6x - 16$

7. $(-x - 9)(-x + 1)$
   $x^2 + 8x - 9$

8. $(x + 2)(x - 2)$
   $x^2 - 4$

9. $(-x - 5)(-x + 8)$
   $x^2 - 3x - 40$

10. $(-x - 7)(x + 9)$
    $-x^2 - 16x - 63$

11. $(-x - 7)(-x + 4)$
    $x^2 + 3x - 28$

12. $(-x - 7)(-x + 4)$
    $x^2 + 3x - 28$

13. $(x - 8)(-x - 8)$
    $-x^2 + 64$

14. $(-x + 2)(x - 1)$
    $-x^2 + 3x - 2$

15. $(-x - 8)(-x - 9)$
    $x^2 + 17x + 72$

16. $(x + 5)(-x + 2)$
    $-x^2 - 3x + 10$

17. $(-x + 7)(-x + 3)$
    $x^2 - 10x + 21$

18. $(-x + 7)(x + 1)$
    $-x^2 + 6x + 7$

19. $(x + 4)(x - 9)$
    $x^2 - 5x - 36$

20. $(x + 5)(x - 1)$
    $x^2 + 4x - 5$

Multiplying Factors (E)

Find the product of each pair of factors.

1. $(x - 7)(-x + 7)$
2. $(-x - 5)(-x - 6)$
3. $(x - 9)(-x - 7)$
4. $(-x + 8)(x + 7)$
5. $(-x + 1)(-x - 1)$
6. $(x + 4)(-x + 1)$
7. $(x + 8)(-x + 8)$
8. $(-x - 3)(x + 8)$
9. $(x + 7)(x + 6)$
10. $(-x + 2)(-x - 4)$
11. $(x + 2)(x - 7)$
12. $(-x + 6)(x + 8)$
13. $(x - 1)(x - 6)$
14. $(x + 6)(-x - 1)$
15. $(x + 5)(-x + 4)$
16. $(x + 6)(-x + 2)$
17. $(x - 9)(x + 5)$
18. $(-x + 6)(-x - 5)$
19. $(-x + 4)(x - 6)$
20. $(-x + 8)(x + 3)$

Multiplying Factors (E) Answers

Find the product of each pair of factors.

1. $(x - 7)(-x + 7)$
   $-x^2 + 14x - 49$

2. $(-x - 5)(-x - 6)$
   $x^2 + 11x + 30$

3. $(x - 9)(-x - 7)$
   $-x^2 + 2x + 63$

4. $(-x + 8)(x + 7)$
   $-x^2 + x + 56$

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

6. $(x + 4)(-x + 1)$
   $-x^2 - 3x + 4$

7. $(x + 8)(-x + 8)$
   $-x^2 + 64$

8. $(-x - 3)(x + 8)$
   $-x^2 - 11x - 24$

9. $(x + 7)(x + 6)$
   $x^2 + 13x + 42$

10. $(-x + 2)(-x - 4)$
    $x^2 + 2x - 8$

11. $(x + 2)(x - 7)$
    $x^2 - 5x - 14$

12. $(-x + 6)(x + 8)$
    $-x^2 - 2x + 48$

13. $(x - 1)(x - 6)$
    $x^2 - 7x + 6$

14. $(x + 6)(-x - 1)$
    $-x^2 - 7x - 6$

15. $(x + 5)(-x + 4)$
    $-x^2 - x + 20$

16. $(x + 6)(-x + 2)$
    $-x^2 - 4x + 12$

17. $(x - 9)(x + 5)$
    $x^2 - 4x - 45$

18. $(-x + 6)(-x - 5)$
    $x^2 - x - 30$

19. $(-x + 4)(x - 6)$
    $-x^2 + 10x - 24$

20. $(-x + 8)(x + 3)$
    $-x^2 + 5x + 24$

Multiplying Factors (F)

Find the product of each pair of factors.

1. $(-x - 7)(-x + 5)$
2. $(-x - 6)(-x + 4)$
3. $(x - 4)(-x - 5)$
4. $(x + 7)(-x - 1)$
5. $(-x + 1)(x - 8)$
6. $(-x + 4)(x + 5)$
7. $(-x + 6)(x + 8)$
8. $(-x + 8)(x + 9)$
9. $(x - 3)(-x + 7)$
10. $(-x - 3)(-x - 8)$
11. $(x - 3)(-x + 3)$
12. $(-x - 7)(x - 7)$
13. $(x + 6)(-x + 2)$
14. $(-x - 2)(x - 8)$
15. $(x - 7)(-x - 2)$
16. $(x + 1)(x - 8)$
17. $(x + 2)(-x + 7)$
18. $(-x - 5)(-x + 3)$
19. $(-x - 7)(-x + 4)$
20. $(-x + 7)(x + 8)$

Multiplying Factors (F) Answers

Find the product of each pair of factors.

1. $(-x - 7)(-x + 5)$
   $x^2 + 2x - 35$

2. $(-x - 6)(-x + 4)$
   $x^2 + 2x - 24$

3. $(x - 4)(-x - 5)$
   $-x^2 - x + 20$

4. $(x + 7)(-x - 1)$
   $-x^2 - 8x - 7$

5. $(-x + 1)(x - 8)$
   $-x^2 + 9x - 8$

6. $(-x + 4)(x + 5)$
   $-x^2 - x + 20$

7. $(-x + 6)(x + 8)$
   $-x^2 - 2x + 48$

8. $(-x + 8)(x + 9)$
   $-x^2 - x + 72$

9. $(x - 3)(-x + 7)$
   $-x^2 + 10x - 21$

10. $(-x - 3)(-x - 8)$
    $x^2 + 11x + 24$

11. $(x - 3)(-x + 3)$
    $-x^2 + 6x - 9$

12. $(-x - 7)(x - 7)$
    $-x^2 + 49$

13. $(x + 6)(-x + 2)$
    $-x^2 - 4x + 12$

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

15. $(x - 7)(-x - 2)$
    $-x^2 + 5x + 14$

16. $(x + 1)(x - 8)$
    $x^2 - 7x - 8$

17. $(x + 2)(-x + 7)$
    $-x^2 + 5x + 14$

18. $(-x - 5)(-x + 3)$
    $x^2 + 2x - 15$

19. $(-x - 7)(-x + 4)$
    $x^2 + 3x - 28$

20. $(-x + 7)(x + 8)$
    $-x^2 - x + 56$

Multiplying Factors (G)

Find the product of each pair of factors.

1. $(x + 2)(-x - 3)$
2. $(-x - 8)(-x - 1)$
3. $(-x - 9)(-x - 2)$
4. $(x + 7)(x + 1)$
5. $(-x - 6)(x - 7)$
6. $(-x + 4)(x + 4)$
7. $(-x + 2)(x - 1)$
8. $(x + 9)(x - 2)$
9. $(x - 8)(x + 4)$
10. $(-x + 5)(x - 6)$
11. $(-x - 6)(x - 6)$
12. $(x + 3)(x - 7)$
13. $(x + 9)(-x + 3)$
14. $(-x + 1)(-x - 3)$
15. $(-x - 7)(-x + 1)$
16. $(x + 8)(x + 2)$
17. $(x - 8)(x - 6)$
18. $(-x + 9)(x - 7)$
19. $(x + 2)(x + 5)$
20. $(-x + 4)(-x - 2)$

Multiplying Factors (G) Answers

Find the product of each pair of factors.

1. $(x + 2)(-x - 3)$
   $-x^2 - 5x - 6$

2. $(-x - 8)(-x - 1)$
   $x^2 + 9x + 8$

3. $(-x - 9)(-x - 2)$
   $x^2 + 11x + 18$

4. $(x + 7)(x + 1)$
   $x^2 + 8x + 7$

5. $(-x - 6)(x - 7)$
   $-x^2 + x + 42$

6. $(-x + 4)(x + 4)$
   $-x^2 + 16$

7. $(-x + 2)(x - 1)$
   $-x^2 + 3x - 2$

8. $(x + 9)(x - 2)$
   $x^2 + 7x - 18$

9. $(x - 8)(x + 4)$
   $x^2 - 4x - 32$

10. $(-x + 5)(x - 6)$
    $-x^2 + 11x - 30$

11. $(-x - 6)(x - 6)$
    $-x^2 + 36$

12. $(x + 3)(x - 7)$
    $x^2 - 4x - 21$

13. $(x + 9)(-x + 3)$
    $-x^2 - 6x + 27$

14. $(-x + 1)(-x - 3)$
    $x^2 + 2x - 3$

15. $(-x - 7)(-x + 1)$
    $x^2 + 6x - 7$

16. $(x + 8)(x + 2)$
    $x^2 + 10x + 16$

17. $(x - 8)(x - 6)$
    $x^2 - 14x + 48$

18. $(-x + 9)(x - 7)$
    $-x^2 + 16x - 63$

19. $(x + 2)(x + 5)$
    $x^2 + 7x + 10$

20. $(-x + 4)(-x - 2)$
    $x^2 - 2x - 8$

Multiplying Factors (H)

Find the product of each pair of factors.

1. $(x - 3)(x - 3)$
2. $(x + 3)(x + 7)$
3. $(x + 4)(x + 4)$
4. $(-x - 4)(-x + 6)$
5. $(-x - 5)(x + 1)$
6. $(-x - 4)(x - 3)$
7. $(-x - 1)(-x + 2)$
8. $(-x - 2)(-x + 6)$
9. $(x - 8)(x - 9)$
10. $(x + 5)(-x - 5)$
11. $(-x + 1)(x - 2)$
12. $(-x - 5)(x + 3)$
13. $(-x - 2)(-x + 2)$
14. $(-x + 2)(x - 7)$
15. $(x + 2)(x + 1)$
16. $(-x + 1)(-x + 8)$
17. $(-x + 1)(x - 3)$
18. $(-x - 9)(x + 6)$
19. $(-x - 9)(x + 3)$
20. $(x + 3)(-x - 9)$

Multiplying Factors (H) Answers

Find the product of each pair of factors.

1. $(x - 3)(x - 3)$
   $x^2 - 6x + 9$

2. $(x + 3)(x + 7)$
   $x^2 + 10x + 21$

3. $(x + 4)(x + 4)$
   $x^2 + 8x + 16$

4. $(-x - 4)(-x + 6)$
   $x^2 - 2x - 24$

5. $(-x - 5)(x + 1)$
   $-x^2 - 6x - 5$

6. $(-x - 4)(x - 3)$
   $-x^2 - x + 12$

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

8. $(-x - 2)(-x + 6)$
   $x^2 - 4x - 12$

9. $(x - 8)(x - 9)$
   $x^2 - 17x + 72$

10. $(x + 5)(-x - 5)$
    $-x^2 - 10x - 25$

11. $(-x + 1)(x - 2)$
    $-x^2 + 3x - 2$

12. $(-x - 5)(x + 3)$
    $-x^2 - 8x - 15$

13. $(-x - 2)(-x + 2)$
    $x^2 - 4$

14. $(-x + 2)(x - 7)$
    $-x^2 + 9x - 14$

15. $(x + 2)(x + 1)$
    $x^2 + 3x + 2$

16. $(-x + 1)(-x + 8)$
    $x^2 - 9x + 8$

17. $(-x + 1)(x - 3)$
    $-x^2 + 4x - 3$

18. $(-x - 9)(x + 6)$
    $-x^2 - 15x - 54$

19. $(-x - 9)(x + 3)$
    $-x^2 - 12x - 27$

20. $(x + 3)(-x - 9)$
    $-x^2 - 12x - 27$

Multiplying Factors (I)

Find the product of each pair of factors.

1. $(-x + 6)(-x + 9)$
2. $(-x - 7)(x + 2)$
3. $(-x - 3)(-x - 3)$
4. $(-x + 1)(-x + 7)$
5. $(-x + 1)(x + 4)$
6. $(x - 1)(x + 9)$
7. $(-x - 9)(x - 8)$
8. $(-x + 3)(x + 5)$
9. $(x + 7)(-x - 2)$
10. $(x + 2)(x - 2)$
11. $(-x + 8)(x - 7)$
12. $(x - 9)(-x + 7)$
13. $(x - 6)(x + 9)$
14. $(x + 9)(-x + 5)$
15. $(x + 2)(x - 1)$
16. $(-x - 3)(x + 5)$
17. $(x - 9)(x - 3)$
18. $(-x - 7)(-x - 6)$
19. $(x - 8)(-x + 6)$
20. $(x - 1)(x + 1)$

Multiplying Factors (I) Answers

Find the product of each pair of factors.

1. $(-x + 6)(-x + 9)$
   $x^2 - 15x + 54$

2. $(-x - 7)(x + 2)$
   $-x^2 - 9x - 14$

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

4. $(-x + 1)(-x + 7)$
   $x^2 - 8x + 7$

5. $(-x + 1)(x + 4)$
   $-x^2 - 3x + 4$

6. $(x - 1)(x + 9)$
   $x^2 + 8x - 9$

7. $(-x - 9)(x - 8)$
   $-x^2 - x + 72$

8. $(-x + 3)(x + 5)$
   $-x^2 - 2x + 15$

9. $(x + 7)(-x - 2)$
   $-x^2 - 9x - 14$

10. $(x + 2)(x - 2)$
    $x^2 - 4$

11. $(-x + 8)(x - 7)$
    $-x^2 + 15x - 56$

12. $(x - 9)(-x + 7)$
    $-x^2 + 16x - 63$

13. $(x - 6)(x + 9)$
    $x^2 + 3x - 54$

14. $(x + 9)(-x + 5)$
    $-x^2 - 4x + 45$

15. $(x + 2)(x - 1)$
    $x^2 + x - 2$

16. $(-x - 3)(x + 5)$
    $-x^2 - 8x - 15$

17. $(x - 9)(x - 3)$
    $x^2 - 12x + 27$

18. $(-x - 7)(-x - 6)$
    $x^2 + 13x + 42$

19. $(x - 8)(-x + 6)$
    $-x^2 + 14x - 48$

20. $(x - 1)(x + 1)$
    $x^2 - 1$

Multiplying Factors (J)

Find the product of each pair of factors.

1. $(x + 4)(-x + 5)$
2. $(x + 8)(x - 4)$
3. $(x + 3)(x + 8)$
4. $(x - 8)(x - 2)$
5. $(-x + 8)(x + 5)$
6. $(-x + 6)(-x - 2)$
7. $(x - 8)(x - 1)$
8. $(-x + 1)(-x - 8)$
9. $(x - 6)(x - 8)$
10. $(-x + 6)(x - 4)$
11. $(x - 3)(-x - 4)$
12. $(-x + 4)(-x + 1)$
13. $(x + 8)(x + 8)$
14. $(-x - 3)(x - 4)$
15. $(x + 9)(-x + 3)$
16. $(-x - 8)(-x + 5)$
17. $(x - 6)(x + 1)$
18. $(-x - 1)(x + 8)$
19. $(x - 9)(x - 7)$
20. $(-x + 1)(x - 2)$

Multiplying Factors (J) Answers

Find the product of each pair of factors.

1. $(x + 4)(-x + 5)$
   $-x^2 + x + 20$

2. $(x + 8)(x - 4)$
   $x^2 + 4x - 32$

3. $(x + 3)(x + 8)$
   $x^2 + 11x + 24$

4. $(x - 8)(x - 2)$
   $x^2 - 10x + 16$

5. $(-x + 8)(x + 5)$
   $-x^2 + 3x + 40$

6. $(-x + 6)(-x - 2)$
   $x^2 - 4x - 12$

7. $(x - 8)(x - 1)$
   $x^2 - 9x + 8$

8. $(-x + 1)(-x - 8)$
   $x^2 + 7x - 8$

9. $(x - 6)(x - 8)$
   $x^2 - 14x + 48$

10. $(-x + 6)(x - 4)$
    $-x^2 + 10x - 24$

11. $(x - 3)(-x - 4)$
    $-x^2 - x + 12$

12. $(-x + 4)(-x + 1)$
    $x^2 - 5x + 4$

13. $(x + 8)(x + 8)$
    $x^2 + 16x + 64$

14. $(-x - 3)(x - 4)$
    $-x^2 + x + 12$

15. $(x + 9)(-x + 3)$
    $-x^2 - 6x + 27$

16. $(-x - 8)(-x + 5)$
    $x^2 + 3x - 40$

17. $(x - 6)(x + 1)$
    $x^2 - 5x - 6$

18. $(-x - 1)(x + 8)$
    $-x^2 - 9x - 8$

19. $(x - 9)(x - 7)$
    $x^2 - 16x + 63$

20. $(-x + 1)(x - 2)$
    $-x^2 + 3x - 2$