Grade 7 Pre-Algebra Worksheet

Name: _____ Date: _____ Score: _____

Solve for the variable. Write your answer on the line.

1. Simplify: 6x + 2x

_____

2. Simplify: 5x + 1x

_____

3. Evaluate $x^2 + 9$ when x = 9

_____

4. Solve: x + 17 = 27

_____

5. Evaluate $x^2 + 10$ when x = 7

_____

6. Simplify: 4x + 3x

_____

7. Simplify: 3x + 2x

_____

8. If x + 4 < 12, and x is a positive integer, what is the largest possible value of x?

_____

9. Evaluate $x^2 + 10$ when x = 5

_____

10. Evaluate 2x + 4 when x = 9

_____

11. Simplify: 5x + 5x

_____

12. Solve: x + 19 = 25

_____

13. If x + 10 < 13, and x is a positive integer, what is the largest possible value of x?

_____

14. If x + 8 < 20, and x is a positive integer, what is the largest possible value of x?

_____

15. Evaluate $x^2 + 5$ when x = 2

_____

16. Simplify: 5x + 2x

_____

17. If x + 9 < 24, and x is a positive integer, what is the largest possible value of x?

_____

18. Evaluate 2x + 5 when x = 9

_____

19. Evaluate $x^2 + 7$ when x = 5

_____

20. If x + 9 < 15, and x is a positive integer, what is the largest possible value of x?

_____

21. Evaluate 4x + 5 when x = 6

_____

22. Simplify: 7x + 5x

23.

24.

_____

If x + 3 < 10, and x is a positive integer, what is the largest possible value of x?

_____

Evaluate $x^2 + 3$ when x = 2

_____

25. Evaluate 4x 2 when x = 9

_____

26. Simplify: 5x + 7x

_____

27. Simplify: 2x + 3x

_____

28. Simplify: 3x + 4x

_____

29. If x + 8 < 17, and x is a positive integer, what is the largest possible value of x?

_____

30. Solve: 4x = 44

_____

ANSWER KEY

Grade 7 Pre-Algebra Worksheet

1. Simplify: 6x + 2x
   8x
2. Simplify: 5x + 1x
   6x
3. Evaluate $x^2 + 9$ when x = 9
   90
4. Solve: x + 17 = 27
   10
5. Evaluate $x^2 + 10$ when x = 7
   59
6. Simplify: 4x + 3x
   7x
7. Simplify: 3x + 2x
   5x
8. If x + 4 < 12, and x is a positive integer, what is the largest possible value of x?
   10
9. Evaluate $x^2 + 10$ when x = 5
   35
10. Evaluate 2x + 4 when x = 9
    22
11. Simplify: 5x + 5x
    10x
12. Solve: x + 19 = 25
    6
13. If x + 10 < 13, and x is a positive integer, what is the largest possible value of x?
    12
14. If x + 8 < 20, and x is a positive integer, what is the largest possible value of x?
    17
15. Evaluate $x^2 + 5$ when x = 2
    9
16. Simplify: 5x + 2x
    7x
17. If x + 9 < 24, and x is a positive integer, what is the largest possible value of x?
    19
18. Evaluate 2x + 5 when x = 9
    23
19. Evaluate $x^2 + 7$ when x = 5
    32
20. If x + 9 < 15, and x is a positive integer, what is the largest possible value of x?
    13
21. Evaluate 4x + 5 when x = 6
    29
22. Simplify: 7x + 5x
    12x
23. If x + 3 < 10, and x is a positive integer, what is
24. Evaluate $x^2 + 3$ when x = 2

the largest possible value of x?

10

7

25. Evaluate 4x 2 when x = 9

34

26. Simplify: 5x + 7x

12x

27. Simplify: 2x + 3x

5x

28. Simplify: 3x + 4x

7x

29. If x + 8 < 17, and x is a positive integer, what is the largest possible value of x?

13

30. Solve: 4x = 44

11