Cotuz

Name: _____ Date: _____

Exponents and Expressions with a Variable

Grade 6 · Ages 11-12 · Math · Expressions & Equations · ★★

Find the value of each expression for the given value of x and write it on the line: do the brackets, the square and the multiplication or division before adding and subtracting. For a multiple-choice question, circle the expression that matches the words.

1. Find the value of $4x + 19$ when $x = 12$.

_____

2. Find the value of $3x - 1$ when $x = 3$.

_____

3. Find the value of $57 - 5x$ when $x = 9$.

_____

4. Find the value of $x^2 + 15$ when $x = 7$.

_____

5. Find the value of $x^2 - 3$ when $x = 3$.

_____

6. Find the value of $2(x + 9)$ when $x = 11$.

_____

7. Find the value of $x \div 5 + 13$ when $x = 50$. _____

8. Find the value of $5x + 5$ when $x = 10$.

_____

9. Find the value of $x^2 - 6$ when $x = 11$.

_____

10. Find the value of $55 - 9x$ when $x = 6$.

_____

11. Which expression means 5 less than n squared?

(A) $n^2 - 5$ (B) $(n - 5)^2$
(C) $n^2 + 5$ (D) $5 - n^2$

12. Find the value of $4x - 2$ when $x = 3$.

_____

13. Find the value of $8(x + 8)$ when $x = 6$.

_____

14. Find the value of $x \div 5 + 19$ when $x = 50$. _____

15. Which expression means n divided by 9?

(A) $9n$ (B) $n - 9$
(C) $n \div 9$ (D) $9 \div n$

16. Find the value of $7x + 9$ when $x = 8$.

_____

17. Which expression means 4 times the sum of n and 8?

(A) $4 + n + 8$ (B) $4(n + 8)$
(C) $4n + 8$ (D) $4(n - 8)$

18. Find the value of $x^2 - 9$ when $x = 10$.

_____

19. Which expression means half of n, plus 9?

(A) $(n + 9) \div 2$ (B) $n \div 2 - 9$
(C) $2n + 9$ (D) $n \div 2 + 9$

20. Find the value of $5(x + 8)$ when $x = 5$.

_____

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ANSWER KEY

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1. Find the value of 4x + 19 when x = 12. **67**

2. Find the value of 3x − 1 when x = 3. **8**

3. Find the value of 57 − 5x when x = 9. **12**

4. Find the value of x^2 + 15 when x = 7. **64**

5. Find the value of x^2 − 3 when x = 3. **6**

6. Find the value of 2(x + 9) when x = 11. **40**

7. Find the value of x ÷ 5 + 13 when x = 50. **23**

8. Find the value of 5x + 5 when x = 10. **55**

9. Find the value of x^2 − 6 when x = 11. **115**

10. Find the value of 55 − 9x when x = 6. **1**

11. Which expression means 5 less than n squared?
Answer: (A) $n^2 - 5$

12. Find the value of 4x − 2 when x = 3. **10**

13. Find the value of 8(x + 8) when x = 6. **112**

14. Find the value of x ÷ 5 + 19 when x = 50. **29**

15. Which expression means n divided by 9?
Answer: (C) n ÷ 9

16. Find the value of 7x + 9 when x = 8. **65**

17. Which expression means 4 times the sum of n and 8?
Answer: (B) 4(n + 8)

18. Find the value of x^2 − 9 when x = 10. **91**

19. Which expression means half of n, plus 9?
Answer: (D) n ÷ 2 + 9

20. Find the value of 5(x + 8) when x = 5. **65**