2-1 Variables and Expressions (pp. 54-57)

Evaluate each expression for the given value of the variables. Show all work, including your substitution

1) $r + 8$ for $r = 5$

$$5 + 8 = 13$$

2) $t - 7$ for $t = 23$

$$23 - 7 = 16$$

3) $5p$ for $p = 13$

$$13 \cdot 5 = 65$$

4) $\frac{c}{8}$ for $c = 80$

$$80 \div 8 = 10$$

5) $4h + 2$ for $h = 3$

$$4 \cdot 3 + 2 = 14$$

6) $4x^2$ for $x = 3$

$$4 \cdot (3^2) = 4 \cdot 9 = 36$$

7) When traveling to Europe, Jessica converts the temperature given in degrees Celsius to a Fahrenheit temperature by using the expression $9x \div 5 + 32$, where x is the Celsius temperature. Find the temperature in degrees Fahrenheit when it is 15°C.

$$9(15) \div 5 + 32 = 135 \div 5 + 32 = \underset{27}{135 \div 5} + 32 = \boxed{59°F}$$

Evaluate each expression to find the missing values in the tables. Show all work, including your substitutions.

8)

x	4x	
50	200	$50 \cdot 4$
40	160	$40 \cdot 4$
100	400	$4 \cdot 100$

9)

n	2n - 3² → 9	
10	11	$2 \cdot 10 - 9$
8	7	$2 \cdot 8 - 9$
5	1	$2 \cdot 5 - 9$

2-2 Translate Between Words and Math (pp. 58-61)

10) z plus 7 $z + 7$

11) 8 subtracted from n $n - 8$

12) the sum of 12 and k $12 + k$

13) 5 take away 9 $5 - 9$

14) The product of 4 and d $4d$

15) 8 less than w $w - 8$

16) Take away 2 from j $j - 2$

17) x to the fifth power x^5

18) y divided by 15 $\frac{y}{15}$

19) 53 added to w $53 + w$

20) 3 times the quantity of x plus 1

$$3(x + 1)$$

21) The quotient of x and 3 plus 5

$$\frac{x}{3} + 5$$

Write an expression for the missing value in each table.

22)

Position	1	2	3	4	n
Term	3	4	5	6	$n+2$

1+2   2+2   3+2   4+2

23)

Position	1	2	3	4	n
Term	3	6	9	12	$3n$

1·3   2·3   3·3   4·3

24)

Position	1	2	3	4	n
Term	5	9	13	17	$4n+1$

1·4+1   2·4+1   3·4+1   4·4+1

25)

Position	1	2	3	4	n
Term	1	3	5	7	$2n-1$

1·2-1   2·2-1   3·2-1   4·2-1

26)

Games		Players
3	X4	12
4	X4	16
5	X4	20
n		$4n$

27)

Bicycles		Wheels
1	X2	2
2	X2	4
3	X2	6
b		$2b$

Things I should do before a test or quiz.

1. _____

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2. _____

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3. _____

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4. _____

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5. _____

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