

Name each property by writing the letter the property matches before each problem.

1) _____ $(6 \cdot 18) \cdot 3 = 6 \cdot (18 \cdot 3)$

2) _____ $(r + s) \cdot 25 = (s + r) \cdot 25$

3) _____ $(18 + y) + 0 = 18 + y$

4) _____ $35 \cdot (10 + c) = (10 + c) \cdot 35$

5) _____ $8(7 + 19) = 8 \cdot 7 + 8 \cdot 19$

6) _____ $59ab = 59ba$

7) _____ $24(0) = 0$

A. Identity Property for Addition

B. Commutative Property for Addition

C. Associative Property for Addition

D. Commutative Property for Multiplication

E. Identity Property for Multiplication

F. Associative Property for Multiplication

G. Zero Property for Multiplication

H. Distributive Property for Addition

Evaluate each expression.

8) $|-52| + |15| - 5$

9) $|-14| - |-19| + 17$

10) $|-14| - |-19|$

Write a variable expression for each word phrase. Use coefficients when needed.

11) the product of -3 and a number increased by 14 _____

12) the quotient of a number and -10 decreased by 5 _____

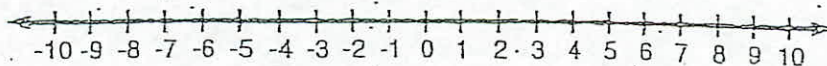
13) 6 less than 2 times a number _____

14) 9 more than a number, divided by -8 _____

Graph the equation on the number line.

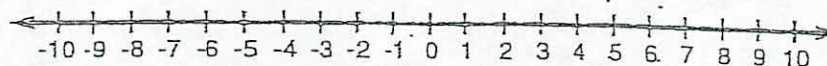
15)

$-8 + 14 = 6$



16)

$3 + -4 = -1$



Simplify each expression using the order of operations. Show all steps for credit.

$$(17) \quad -6(-2 + 13)$$

$$(18) \quad (43)(-18)$$

$$(19) \quad -27 - (-13)$$

$$(20) \quad 7^2 + 56 \div 7 - 6^2$$

$$(21) \quad 12^2 - (-5 - -4)$$

$$(22) \quad \frac{384}{-4}$$

$$(23) \quad \frac{-40 - 20}{-20 - -5}$$

$$(24) \quad \frac{8^2 + (-10 + 21)}{3^3 - 36 \div 18}$$

$$(25) \quad \frac{-3(4 - 11)}{2^3 - 3^0}$$

Evaluate each expression for

$$x = 3$$

$$y = -4$$

$$z = -6$$

$$(26) \quad x + y$$

$$(27) \quad 12 - z$$

$$(28) \quad y - z$$

$$(29) \quad |x| - |y|$$

$$(30) \quad 2(x - y) - (-10)$$

$$(31) \quad \frac{10y + 5x + 8^0}{2y - z}$$

Solve each equation using inverse operations.
Show all steps for credit. Label when needed.

32

$$-26 = x - 19$$

33

$$-18 + r = -37$$

34

$$672 = -24b$$

35

$$23 = \frac{x}{-11}$$

36

After his payment, Mr. Weber's credit card balance was \$245.76. His payment was for \$75.00. Write and solve an equation to find the amount of his credit card bill.

37

T.J. gave 16 books to the library book sale. This was $\frac{1}{3}$ of his books. Write and solve an equation to determine how many books b T.J. had.

38

Jar candles at the Candle Co. cost \$4. Nikki spent \$92 buying jar candles for party favors. Write and solve an equation to determine how many jar candles c Nikki bought at the Candle Co.