

Lesson 3 -- Section 1.7 Algebraic Expressions and Properties of Real Numbers

Evaluate the expression for the given substitution.

1) $(a+b) - c$ when $a = -3$, $b = -2$, $c = -6$

2) $(a+b) + 3c$ when $a = 3$, $b = -12$, $c = 8$

3) $(a+2b) + c$ when $a = 5$, $b = -10$, $c = 6$

Evaluate the expression for the given substitution.

4) $\frac{5a+4b}{a+b}$ when $a = 3$, $b = -2$, $c = -1$

5) $\frac{a-4b}{a+2b}$ when $a = 3$, $b = -2$, $c = -1$

6) $\frac{5a-3b}{6a+b}$ when $a = 3$, $b = -2$, $c = -1$

Rewrite each expression using the distributive property.

7) $12(4x-3) - 5x$

8) $-14(7x-1) + 17x$

9) $-4(8x+4) - 7x$

Translate the phrase into an algebraic expression.

10) 3 less than twice a number. Let x represent the unknown quantity.

11) 13 less than five times a number. Let x represent the unknown quantity.

12) 3 more than twice a number. Let x represent the unknown quantity.

13) 5 more than three times a number. Let x represent the unknown quantity.

14) 13 subtracted from three times a number. Let x represent the unknown quantity.

15) 3 subtracted twice a number. Let x represent the unknown quantity.