Alg 1
Review Ch. 1.1-1.4
MCT 1.1-1.4 Monday
Quiz 1.3-1.4 today

Example 1

Write a verbal expression for $4x + 9$.

Sum of 4 times x and 9

Example 2

Write an algebraic expression for *the difference of twelve and two times a number cubed.*

$(12 - 2n^3)$

Example 4

Evaluate the expression $3(9-5)^2 \div 8$.

$3(4)^2 \div 8$

$3 \cdot 16 \div 8$

6

Example 5

Evaluate the expression $(5m - 2n) \div p^2$ if $m = 8, n = 4, p = 2$.

$(40 - 8) \div 2^2$

$32 \div 4$

8

Example 7

Use the Distributive Property to rewrite the expression $5(3 + 8)$. Then evaluate.

$5 \cdot 3 + 5 \cdot 8$

$15 + 40$

55

Example 8

Rewrite the expression $6(x + 4)$ using the Distributive Property. Then simplify.

$6 \cdot x + 6 \cdot 4$

$6x + 24$

Example 9

Rewrite the expression $(3x - 2)(-5)$ using the Distributive Property. Then simplify.

Write an algebraic expression for each verbal expression.

1. six more than a number $n+6$
2. twelve less than the product of three and a number $3 \cdot n - 12$
3. four divided by the difference between a number and seven $4 \div (n-7)$ $4 \div n - 7$

$$\frac{4}{(n-7)} \qquad \frac{4}{n} - 7$$

37 + 13 + 29 + 21 Comm

50 + 50 Sub

100 Sub

Evaluate each expression. Name the property used in each step.

7. $13 + (16 - 4^2)$

8. $\frac{2}{9}[9 \div (7 - 5)]$

9. $37 + 29 + 13 + 21$

7. $13 + (16 + \overline{16})$ Subs

$13 + 0$ add inv.

13 add ident

$\frac{2}{9}[9 \div 2]$

$\frac{2}{9}[11]$ Subs

$\frac{22}{9}$ Subs

Rewrite each expression using the Distributive Property. Then simplify.

10. $4(x + 3)$

$4 \cdot x + 4 \cdot 3$

$4x + 12$

11. $(5p - 2)(-3)$

$-3(5p - 2)$

$-15p + 6$

$2(x + 5) + 5(x + 1)$

$2x + 10 + 5x + 5$

$7x + 15$