

Review Homework

Name: _____

Simplify:

1. $7x - 4(6 - x) + 12$

2. $10 - 1(2y - 6) - y$
 $10 - 2y + 6 - y$

3. What is the value of $[(5 \cdot 9) \div \underline{x}] + 6$, when $\underline{\underline{x = 3}}$?

4. $3 \cdot 2 + 4 \cdot 5$

$$[(5 \cdot 9) \div 3] + 6$$

Write this sentence as an algebraic equation. Solve the equation.

5. Twice the sum of a number and 3, is equal to 4 times the difference of the number and 1.

Write an Equation:

Then solve it.

$$2(n + 3) = 4(n - 1)$$

Solve the following equations:

6. $5(x + 2) = 10 + 5x$

7. $3x + 6 = x - 1$

8. $-\frac{x}{3} = -21$

Solve for the indicated variable:

9. $5a = 2b + 6$, solve for b

10. $V = \frac{bh}{3}$, solve for h

$$\frac{5a - 6}{2} = \frac{2b}{2}$$

$$\boxed{\frac{5a - 6}{2} = b}$$

Application Problems: Write and Solve an Equation for the following situations.

11. The cost of renting a car is \$20 plus \$0.40 per mile. If John paid \$110.80 total, how far did John travel?
 $20 + 0.40m = 110.80$ $m = \text{miles}$

The sum of three consecutive even integers is 264. Find the three integers.