

Name: \_\_\_\_\_ Pd.: \_\_\_\_\_ Date: \_\_\_\_\_

## Quiz Solving Multi-Step Equations

Solve each equation. SHOW ALL WORK!!!

1.  $-10 - 6x = -34$

2.  $\frac{2}{3}x + 9 = -11$

3.  $\frac{x}{5} - 9 = -4$

4.  $\frac{-4}{5}(x + 8) = 12$

5.  $-(b + 4) = -18$

6.  $5(x - 8) = -20$

For each word problem below: *read* the problem, *write* the equation that represents the situation, and find the *solution*!

7. An online retailer charged \$6.99 plus 55 cents per pound to ship electronic purchases. How many pounds is a DVD player for which the shipping charge is \$11.94?

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

8. Suppose your school is selling magazine subscriptions. Each subscription costs \$12. The school must also pay a 1-time fee of \$18. Write and solve an equation to determine the number of subscriptions that can be sold to earn a profit of \$246.

**Equation:** \_\_\_\_\_

**Solution:** \_\_\_\_\_

9. The length of each side of a square is increased by 6 inches, so the perimeter is now 36 inches. Write and solve an equation to find the original length of each side of the square.

**Equation:** \_\_\_\_\_

**Solution:** \_\_\_\_\_

10. Mrs. Palmer bought one pair of goggles, one bathing suit, and one beach towel for each of her three daughters.

Item	Price (\$)
Goggles	6
Bathing suit	25
Beach towel	13

Suppose she had \$18 left after buying the swimming items. Write an equation to find the amount Mrs. Palmer originally had to spend on each daughter.

**Equation:** \_\_\_\_\_

**Solution:** \_\_\_\_\_