Unit 1 - Week 1

Assignment 1

1. Given the following expressions, solve for the unknown variable:
   a. 3x + 4 = 11
   b. 2y - 5 = 7
   c. 4z + 2 = 10

2. Write an equation to solve the following problem:
   A store sells apples for $0.50 each and oranges for $0.75 each. If a customer bought 4 apples and 3 oranges, how much did the customer spend?

3. Solve the system of equations:
   a. 2x + 3y = 12
   b. 4x - y = 8

4. A car travels 120 miles in 2 hours. What is the car's average speed?

5. A rectangle has a length of 10 units and a width of 5 units. What is the area of the rectangle?

6. A triangle has sides of length 3, 4, and 5 units. Is the triangle a right triangle?

7. A circle has a radius of 7 units. What is the area of the circle?

8. A square has a side length of 6 units. What is the perimeter of the square?

9. A parallelogram has sides of length 8 and 10 units. What is the perimeter of the parallelogram?

10. A trapezoid has bases of length 5 and 10 units and a height of 4 units. What is the area of the trapezoid?