

Name _____

Date _____

University of Baltimore
Math 107: College Algebra
Homework: Chapter 1.1-1.2(C)

1. Solve: $5(x - 2) + 2x = 13 - (6x - 3)$.

2. Solve: $-\frac{1}{4}x - \frac{x+3}{2} = 2$.

3. Solve: $x - 5 - (-3x + 1) = 10x - 6(x + 1)$.

4. Solve for y: $W = 4x + 2y$.

For all word problems below, you must a) define your variable(s); b) write an algebraic equation; c) show your work to solve the equation; and d) state an answer with the correct label.

5. Aubrey leaves home, walking at 4 mph. Belinda leaves at the same time going in the opposite direction running at 7 mph. How long will it be before Aubrey and Belinda are 13.2 miles apart?

6. Carlene has \$7000 to invest, some at 4% and the rest at 3%. If her annual interest totals \$260, how much did she invest at each rate?

7. A small business spends \$3000 per month on fixed costs, plus \$7 for materials for each widget they produce. If they have \$5750, how many widgets can they make?

8. A room has a length which is 9 ft. less than twice its width. If its perimeter is 54 ft., how wide is the room?