

Transitions to College Math

1.1 Word Problems C

1. Find four consecutive even integers such that the sum of the first three exceeds the fourth by 8.

$$x, x+2, x+4, x+6$$

$$x + (x+2) + (x+4) = (x+6) + 8$$

$$3x + 6 = x + 14$$

$$2x = 8$$

$$x = 4$$

$$4, 6, 8, 10$$

3. The sum of three consecutive natural numbers is 804. Find the numbers.

$$x, x+1, x+2$$

$$x + (x+1) + (x+2) = 804$$

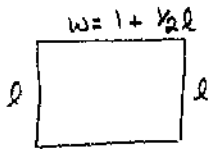
$$3x + 3 = 804$$

$$3x = 801$$

$$x = 267$$

$$267, 268, 269$$

5. The width of a rectangle is 1 meter more than half the length of the rectangle. If the perimeter of the rectangle is 110 meters, find the width and the length.



$$P = 110$$

$$1 + \frac{1}{2}l + 1 + \frac{1}{2}l + l + l = 110$$

$$2 + 3l = 110$$

$$3l = 108$$

$$l = 36 \text{ m}$$

$$w = 1 + \frac{1}{2}(36) = 19 \text{ m}$$