

HW Motion Word Problems
10/23

5.) $54 = 2(2x+2) + 2(x-2)$

$$54 = 2x + 4 + 2x - 4$$

$$54 = 4x$$

$$\frac{54}{4} = \frac{4x}{4}$$

$$13.5 = x$$

ans
width = 9in

length = $2(9) - 5 = 13$ in

7.) $5x + 25(16 - x) = 260$

$$5x + 400 - 25x = 260$$

$$-20x + 400 = 260$$

$$\frac{-20x + 400 - 400}{-20} = \frac{260 - 400}{-20}$$

$$\frac{-20x}{-20} = \frac{-140}{-20}$$

$$x = 7$$

ans

nicks = 7

quarters = 9

$$16 - 7 = 9$$

8.) $2x + 3(x+2) = 126$

$$2x + 3x + 6 = 126$$

$$5x + 6 = 126$$

$$\frac{5x + 6 - 6}{5} = \frac{126 - 6}{5}$$

$$\frac{5x}{5} = \frac{120}{5}$$

$$x = 24$$

ans

$$x = 24$$

$$x + 1 = 25$$

$$x + 2 = 26$$