

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 22.1 - Literal Equations & FormulasUse the formula $P = 2l + 2w$ to find the width, w , for each rectangle. (Hint: Would these problems be easier if the formula were solved for another variable?)

1. Find the width of a rectangle with length 24 cm and perimeter 66 cm.

CLICK HERE FIRST!

$$w = \frac{P}{2} - l$$

$$w = \frac{66}{2} - 24$$

$$w = 33 - 24$$

$$w = 9 \text{ cm}$$

2. Find the width of a rectangle with length 12 m and perimeter 96 m.

$$w = \frac{P}{2} - l$$

$$w = \frac{96}{2} - 12$$

$$w = 48 - 12$$

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

3. Find the width of a rectangle with length 25 in and perimeter 94 in.

$$w = \frac{P}{2} - l$$

$$w = \frac{94}{2} - 25$$

$$w = 47 - 25$$

$$w = 22 \text{ in}$$

4. Find the width of a rectangle with length 16 yd and perimeter 66 yd.

$$w = \frac{P}{2} - l$$

$$w = \frac{66}{2} - 16$$

$$w = 33 - 16$$

$$w = 17 \text{ yd}$$

5. Find the width of a rectangle with length 27 cm and perimeter 74 cm.

$$w = \frac{P}{2} - l$$

$$w = \frac{74}{2} - 27$$

$$w = 37 - 27$$

$$w = 10 \text{ cm}$$

6. Find the width of a rectangle with length 19 in and perimeter 56 in.

$$w = \frac{P}{2} - l$$

$$w = \frac{56}{2} - 19$$

$$w = 28 - 19$$

$$w = 9 \text{ in}$$

7. Find the width of a rectangle with length 20 ft and perimeter 100 ft.

$$w = \frac{P}{2} - l$$

$$w = \frac{100}{2} - 20$$

$$w = 50 - 20$$

$$w = 30 \text{ ft}$$

8. Find the width of a rectangle with length 45 m and perimeter 150 m.

$$w = \frac{P}{2} - l$$

$$w = \frac{150}{2} - 45$$

$$w = 75 - 45$$

$$w = 30 \text{ m}$$

9. Find the width of a rectangle with length 51 cm and perimeter 158 cm.

$$w = \frac{P}{2} - l$$

$$w = \frac{158}{2} - 51$$

$$w = 79 - 51$$

$$w = 28 \text{ cm}$$