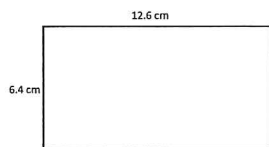


Finding Perimeter worksheet

Name

KEY

- 1) Find the perimeter of the rectangle



$$\begin{aligned}
 P &= 2l + 2w \\
 P &= 2(12.6) + 2(6.4) \\
 P &= 25.2 + 12.8 \\
 \boxed{P &= 38 \text{ cm}}
 \end{aligned}$$

- 2) Find the perimeter of a rectangle that has a length of 10 feet and a width of 12.5 feet.

$$\begin{aligned}
 P &= 2(10) + 2(12.5) \\
 P &= 20 + 25 \\
 \boxed{P &= 45 \text{ feet}}
 \end{aligned}$$

- 3) You use 98 feet of crown molding to finish a rectangular room. The length is 18 feet. What is the width?

$$\begin{aligned}
 P &= 2l + 2w \\
 98 &= 2(18) + 2w \\
 98 &= 36 + 2w \\
 -36 & \quad -36 \\
 \hline
 62 &= 2w \\
 \frac{62}{2} &= \frac{2w}{2} \\
 \boxed{w &= 31 \text{ feet}}
 \end{aligned}$$

- 4) You fence in a rectangular play area for your dog and use 146 feet of fencing. The play area is 40 feet long, how wide is it?

$$\begin{aligned}
 P &= 2l + 2w \\
 146 &= 2(40) + 2w \\
 146 &= 80 + 2w \\
 -80 & \quad -80 \\
 \hline
 66 &= 2w \\
 \frac{66}{2} &= \frac{2w}{2} \\
 \boxed{w &= 33 \text{ feet}}
 \end{aligned}$$

- 5) A rectangle has a perimeter of 24 inches. The length is 4 inches longer than the width. What are the dimensions?

$$P = 24 \quad l = 4 + w$$

$$\begin{aligned}
 P &= 2l + 2w \\
 24 &= 2(4 + w) + 2w \\
 24 &= 8 + 2w + 2w
 \end{aligned}$$

$$\begin{aligned}
 24 &= 8 + 4w \\
 -8 & \quad -8 \\
 \hline
 16 &= 4w \\
 \frac{16}{4} &= \frac{4w}{4} \\
 \boxed{4 &= w}
 \end{aligned}$$

$$\begin{aligned}
 l &= 4 + w \\
 l &= 4 + 4 \\
 \boxed{l &= 8}
 \end{aligned}$$

$$\begin{aligned}
 \text{CHECK: Does } 24 &= 2(8) + 2(4) \\
 24 &= 16 + 8 \\
 24 &= 24 \quad \checkmark
 \end{aligned}$$

- 6) A rectangle has a perimeter of 50 inches. The length is 5 inches shorter than the width. What are the dimensions?

$$P = 50 \text{ in} \quad l = w - 5$$

$$\begin{aligned}
 P &= 2l + 2w \\
 50 &= 2(w - 5) + 2w \\
 50 &= 2w - 10 + 2w \\
 50 &= 4w - 10 \\
 +10 & \quad +10 \\
 \hline
 60 &= 4w
 \end{aligned}$$

$$\begin{aligned}
 60 &= 4w \\
 \frac{60}{4} &= \frac{4w}{4} \\
 \boxed{15 &= w} \\
 l &= w - 5 \\
 l &= 15 - 5 \\
 \boxed{l &= 10}
 \end{aligned}$$

$$\begin{aligned}
 \text{CHECK:} \\
 \text{Is } 50 &= 2(10) + 2(15) \\
 50 &= 20 + 30 \\
 50 &= 50 \quad \checkmark
 \end{aligned}$$