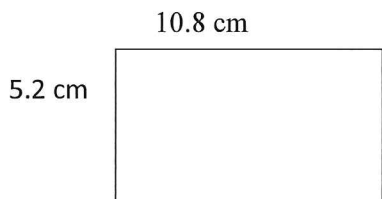


Finding Perimeter Quiz

Name KEY

- 1) Find the perimeter of the rectangle



$$\begin{aligned}
 P &= 2(l + w) \\
 P &= 2(10.8 + 5.2) \\
 P &= 2(16) \\
 P &= 32 \text{ cm}
 \end{aligned}$$

- 2) Find the perimeter of a rectangle that has a length of 6.4 feet and a width of 11.7 feet.

$$\begin{aligned}
 P &= 2(l + w) \\
 P &= 2(6.4 + 11.7)
 \end{aligned}$$

$$\begin{aligned}
 P &= 2(18.1) \\
 P &= 36.2
 \end{aligned}$$

36.2 feet

- 3) You use 65 feet of baseboard to finish a rectangular room. The length is 12 feet. What is the width?

$$\begin{aligned}
 65 &= 2(12 + w) \\
 65 &= 24 + 2w \\
 \underline{-24} \quad \underline{-24}
 \end{aligned}$$

$$\begin{aligned}
 41 &= 2w \\
 \frac{41}{2} &= w \\
 20\frac{1}{2} &= w
 \end{aligned}$$

20½ ft

- 4) You fence in a rectangular garden and use 212 feet of fencing. The garden is 58 feet long, how wide is it?

$$\begin{aligned}
 212 &= 2(58 + w) \\
 212 &= 116 + 2w \\
 \underline{-116} \quad \underline{-116}
 \end{aligned}$$

$$96 = 2w$$

$$\begin{aligned}
 96 &= 2w \\
 \frac{96}{2} &= \frac{2w}{2} \\
 48 &= w
 \end{aligned}$$

w = 48 feet

- 5) A rectangle has a perimeter of 38 inches. The length is 5 inches longer than the width. What are the dimensions?

$$l = w + 5$$

$$\begin{aligned}
 38 &= 2((w + 5) + w) \\
 38 &= 2(2w + 5) \\
 38 &= 4w + 10 \\
 \underline{-10} \quad \underline{-10} \\
 28 &= 4w
 \end{aligned}$$

$$\frac{28}{4} = \frac{4w}{4}$$

$$7 = w$$

width is 7 inches

$$l = (7) + 5$$

$$l = 12 \text{ inches}$$

- 6) A rectangle has a perimeter of 24 inches. The length is 10 inches shorter than the width. What are the dimensions?

$$l = w - 10$$

$$\begin{aligned}
 24 &= 2((w - 10) + w) \\
 24 &= 2(2w - 10) \\
 24 &= 4w - 20 \\
 \underline{+20} \quad \underline{+20} \\
 44 &= 4w
 \end{aligned}$$

$$\frac{44}{4} = \frac{4w}{4}$$

$$w = 11$$

$$l = w - 10$$

$$l = 11 - 10$$

$$l = 1$$

width = 11 inches
length = 1 inch