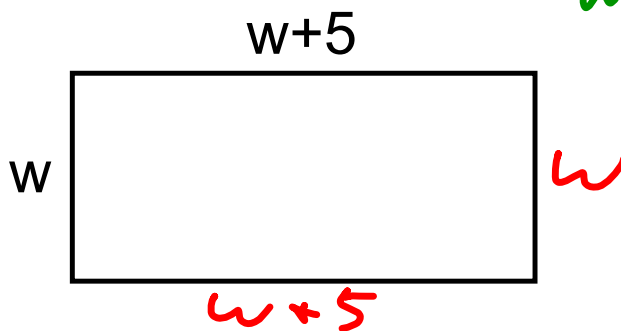


HW: Worksheet

**Warm up:**

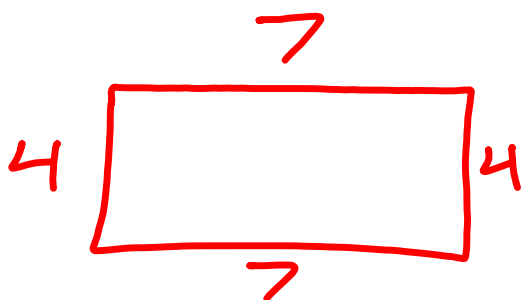
Write and simplify an expression to represent the perimeter of the rectangle.



$$\underbrace{w}_{\text{w}} + \underbrace{5}_{\text{5}} + \underbrace{w}_{\text{w}} + \underbrace{w}_{\text{w}} + \underbrace{5}_{\text{5}} + \underbrace{w}_{\text{w}}$$

$$10 + 4w$$

$$4w + 10$$



$$4 + 7 + 4 + 7 = 22$$

# HW Solutions

You went to the store with your friend. You bought 3 packs of gum and a bag of chips. Your friend bought two packs of gum. Write an expression to represent the total bill.

$$\begin{array}{l} 3g + c + 2g \\ \hline 5g + c \end{array}$$

You went to the gas station and put 18 gallons of gas in your car and 3 gallons of gas in a gas can. If your total bill was \$51.03, how much was the gas station charging for each gallon of gas?

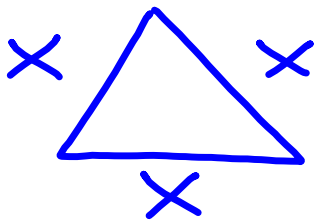
$$\underline{18g} + \underline{3g} = 51.03$$

$$\begin{array}{r} 2.43 \\ 21 \overline{)51.03} \\ \underline{-42} \downarrow \\ 90 \\ \underline{-84} \downarrow \\ 63 \\ \underline{-63} \\ 0 \end{array}$$

$$\begin{array}{r} 21g = 51.03 \\ \underline{21} \quad \underline{21} \\ g = 2.43 \end{array}$$

$$\text{\$}2.43$$

The perimeter of an equilateral triangle is 21.33cm. What is the length of each side of the triangle?



$$\therefore x + \therefore x + \therefore x = 21.33$$

$$\frac{3x}{3} = \frac{21.33}{3}$$

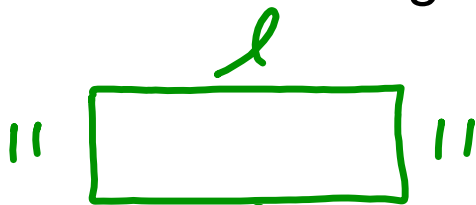
$$x = 7.11$$

$$7.11\text{cm}$$

$$\begin{array}{r} 7.11 \\ 3 \overline{) 21.33} \\ \underline{-21} \phantom{3} \\ 0 \phantom{3} \\ \underline{-0} \\ 0 \end{array}$$

long  
long  
long

The perimeter of a rectangle is 99in. Its width is 11in. Find the length.



$$\begin{array}{r} 25 \overline{) 77.0} \\ \underline{-64} \phantom{0} \\ 13 \phantom{0} \\ \underline{-16} \phantom{0} \\ 10 \phantom{0} \\ \underline{-10} \phantom{0} \\ 0 \phantom{0} \end{array}$$

38.5 in

$$l + l + 11 + 11 = 99$$

$$\begin{array}{r} 2l + 22 = 99 \\ - 22 \phantom{=} - 22 \\ \hline \end{array}$$

$$\begin{array}{r} 2l = 77 \\ \hline \frac{2l}{2} = \frac{77}{2} \\ l = 38.5 \end{array}$$

1) Write and simplify an expression to represent the perimeter of a rectangle that is 2in shorter than it is wide.

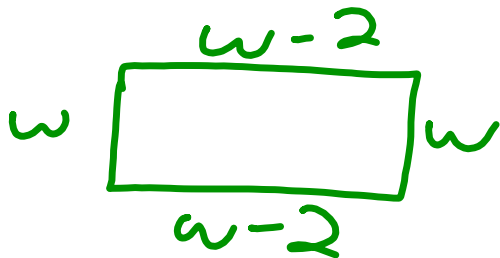
2) Mary and Tom stopped at Wawa for some food. Mary bought 3 bags of Sour Patch Kids and a vanilla milkshake. Tom bought 2 bags of Sour Patch Kids. If milkshakes cost \$2.20 and their total bill was \$10.70, how much does a bag of Sour Patch Kids cost?

3) A rectangular pool has a perimeter of 82ft. If the length is 28ft, what is the width?

4) You have a desk that is  $45\frac{1}{2}$  in wide and you want to place it in the middle of a wall that is  $71\frac{3}{4}$  in wide. How far from the edge of each wall should the desk be placed?



1) Write and simplify an expression to represent the perimeter of a rectangle that is 2 in shorter than it is wide.



$$\underline{w} + \underline{w-2} + \underline{w} + \underline{w-2}$$

$$4w - 4$$

2) Mary and Tom stopped at Wawa for some food. Mary bought 3 bags of Sour Patch Kids and a vanilla milkshake. Tom bought 2 bags of Sour Patch Kids. If milkshakes cost \$2.20 and their total bill was \$10.70, how much does a bag of Sour Patch Kids cost?

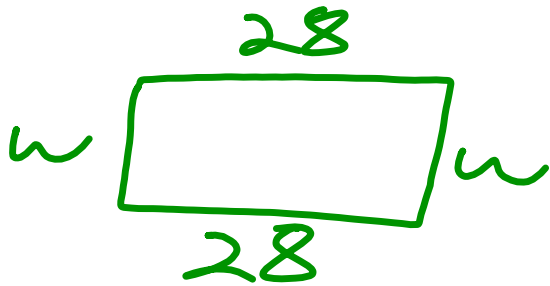
$$\underline{3s} + 2.20 + \underline{2s} = 10.70$$

$$5s + 2.20 = 10.70$$

$$\begin{array}{r} 5s + 2.20 = 10.70 \\ - 2.20 \quad - 2.20 \\ \hline 5s = 8.50 \\ \frac{5s}{5} = \frac{8.50}{5} \quad s = 1.7 \end{array}$$

\$1.70

3) A rectangular pool has a perimeter of 82ft. If the length is 28ft, what is the width?



$$w + 28 + w + 28 = 82$$
$$2w + 56 = 82$$

4) You have a desk that is  $45\frac{1}{2}$  in wide and you want to place it in the middle of a wall that is  $71\frac{3}{4}$  in wide. How far from the edge of each wall should the desk be placed?

February 10, 2022

