

HW Solutions

③

$$\underline{3c} + \underline{c} = 11.20$$

$$\begin{array}{r} 2.8 \\ 4 \overline{) 11.2} \\ \underline{- 8} \\ 32 \\ \underline{- 32} \\ 0 \end{array}$$

$$\frac{4c}{4} = \frac{11.20}{4}$$

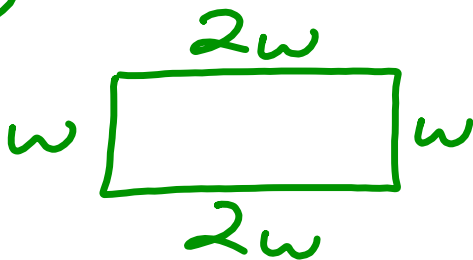
$$c = 2.8$$

$$\text{\$}2.80$$

$$\textcircled{1} \quad \underline{3p + 2s} + \underline{2p + 1s}$$

$$\textcircled{5p + 3s}$$

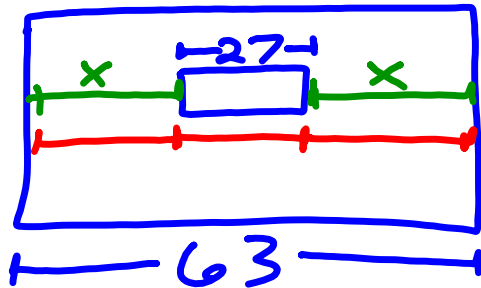
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$$w + 2w + w + 2w$$

$$6w$$

⑥

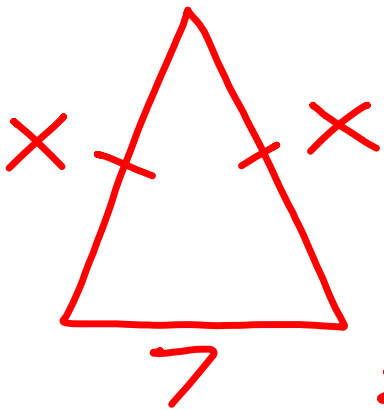


$$\begin{aligned}x + 27 + x &= 63 \\2x + 27 &= 63 \\-27 &-27\end{aligned}$$

$$\begin{aligned}\frac{2x}{2} &= \frac{36}{2} \\x &= 18\end{aligned}$$

18 in

⑤



$$\begin{array}{r} 22.5 \\ 2 \overline{)45.0} \\ \underline{-44} \\ 05 \\ \underline{-4} \\ 10 \end{array}$$

$$x + x + 7 = 52$$

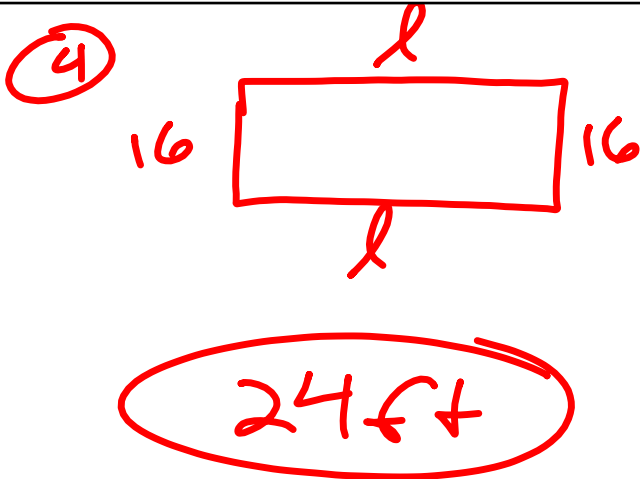
$$2x + 7 = 52$$

$$\underline{-7 \quad -7}$$

$$\frac{2x = 45}{2 \quad 2}$$

$$x = 22.5$$

22.5 m



$$16 \cdot l + 16 \cdot l = 80$$

$$2l + 32 = 80$$

$$-32 \quad -32$$

$$2l = 48$$

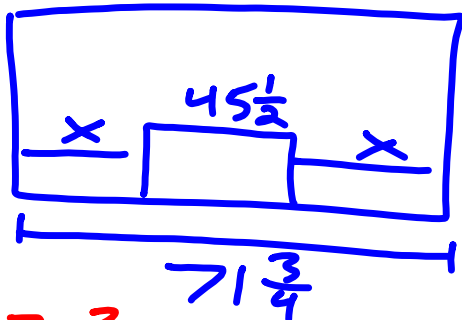
$$\frac{2l}{2} = \frac{48}{2}$$

$$l = 24$$

Sam bought 5 sodas and 1 chicken

$$5S + C$$

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?



$$71\frac{3}{4} - 45\frac{1}{2} = \frac{71 \times 4}{4} - \frac{91}{2}$$

$$\frac{287}{4} - \frac{91}{2} = \frac{287}{4} - \frac{182}{4} = \frac{105}{4}$$

$$\frac{105}{4} \div 2$$

$$\frac{105}{4} \cdot \frac{1}{2} = \frac{105}{8}$$

$$x + 45\frac{1}{2} + x = 71\frac{3}{4}$$

$$2x + 45\frac{1}{2} = 71\frac{3}{4}$$

$$-45\frac{1}{2} \quad -45\frac{1}{2}$$

$$\frac{2x}{2} = \frac{105}{4}$$

$$x = \frac{105}{8}$$

$$13\frac{1}{8} \text{ in}$$

$$\begin{array}{r} 13 \\ 8 \overline{) 105} \\ \underline{-81} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

Showdown



You went to the grocery store and bought a rotisserie chicken and three bottles of soda. If the chicken costs \$8 and your total bill was \$15.80, how much does a bottle of soda cost?

$$\begin{array}{r} 8 + 3s = 15.80 \\ -8 \qquad -8.00 \\ \hline \end{array}$$

$$\begin{array}{r} 2.6 \\ 3 \overline{)7.8} \\ \underline{-6} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

$$\begin{array}{r} 3s = 7.80 \\ \underline{3} \\ \end{array}$$

$$s = 2.6$$

$$\text{\$2.60}$$

$$\begin{array}{l} -10 - 2 \\ -10 + (-2) \end{array}$$

$$\begin{array}{r} -10 = 2 - 3x \\ -2 \quad -2 \\ \hline -12 = -3x \\ \hline \frac{-12}{-3} = \frac{-3x}{-3} \\ \hline 4 = x \end{array}$$

$$\begin{array}{r} 3x + 4 = -5 \\ -4 \quad -4 \\ \hline 3x = -9 \\ \frac{3x}{3} = \frac{-9}{3} \\ \hline x = -3 \end{array}$$

$-5 - 4$
 $-5 + (-4)$

$$\frac{4}{5}x - 2 = 9$$

$$\frac{5}{4} \left(\frac{4}{5}x \right) = \left(\frac{11}{1} \right) \frac{5}{4}$$

$$x = \frac{55}{4} = 13\frac{3}{4}$$

$$\begin{array}{r} 13 \\ 4 \overline{) 55} \\ \underline{-40} \\ 15 \\ \underline{-12} \\ 3 \end{array}$$

Factor.

$$20xy - 6y$$

$$2y(10x - 3)$$

Simplify.

$$\underline{-3x} + 8 + \underline{6y} - \underline{5x} - \underline{9y}$$

$$\underline{-8x - 3y + 8}$$

$$\begin{array}{r}
 13.22 = -1.9 + 4.2n \\
 + 1.90 \quad + 1.9 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 15.12 = 4.2n \\
 \hline
 4.2 \qquad 4.2
 \end{array}$$

$$4.2 \overline{) 15.12}$$

3.6

$$3.6 = n$$

$$\begin{array}{r}
 42 \overline{) 151.2} \\
 \underline{-126} \quad \downarrow \\
 252 \\
 \underline{-252} \\
 0
 \end{array}$$

Simplify.

$$-7 - 2(3x + 5)$$

$$\underline{-7} - 6x - \underline{10}$$

$$\textcircled{-6x - 17}$$

$$-\frac{2}{3}x + 2\frac{1}{5} = 1\frac{1}{2}$$

$$\frac{3}{10} \cdot \frac{2}{3} \cdot \frac{1}{5} = \frac{1}{10} \cdot \frac{2}{2} \cdot \frac{1}{2} = \frac{1}{10}$$

$$-\frac{3}{2} \left(-\frac{2}{3}x \right) = \left(-\frac{7}{10} \right) \left(-\frac{3}{2} \right)$$

$$x = \frac{21}{20} = \frac{1}{20}$$

Simplify.

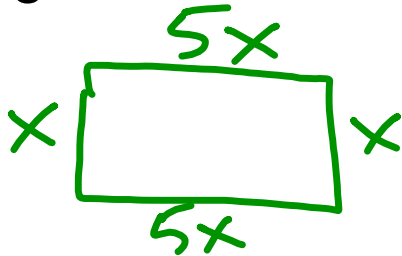
$$\underline{3\frac{3}{4}x} - \frac{5}{7}y - \underline{5\frac{1}{2}x}$$

$$\textcircled{-1\frac{3}{4}x - \frac{5}{7}y}$$

$$\begin{array}{r} 3\frac{3}{4} - 5\frac{1}{2} \\ \frac{15}{4} - \frac{11}{2} \\ \frac{15}{4} - \frac{22}{4} \\ -\frac{7}{4} \\ -1\frac{3}{4} \end{array}$$

Write and simplify an expression to represent the following:

The perimeter of a rectangle that is five times as long as it is wide.



$$x + 5x + x + 5x$$
$$\textcircled{12x}$$

$$8 - w = -5$$

Simplify.

$$-\frac{4}{5} + \frac{2}{3}(4c + 5)$$

Bob and Gina went to Walmart last night. Bob bought a frozen pizza and three steaks. Gina bought a frozen pizza and 2 steaks. If frozen pizzas cost \$8.50 and their total bill was \$48.50, how much did each steak cost?

Ellie and James collect Pokemon cards. Ellie has 6 less than twice as many as James. If Ellie has 38 cards, how many does James have?

$$8 = 6 - \frac{n}{3}$$

Alex makes \$9 per hour at his job and is saving up for a computer that costs \$1115. If he already has \$512 saved up, how many hours will he need to work before he can buy the computer?

Factor.

$$4x^2y - 8xy + 60y$$

You went to a farm stand with your friend. You picked out 5 apples and 2 peaches. Your friend got 3 apples and 1 peach. Write and simplify an expression to represent the total bill.

February 11, 2022

