

1 Read the problem.	2 Identify the question.
3 Find the important information.	4 Write an equation.
5 Solve the equation.	6 Answer using words.

Underline it

Highlight it!  
What are they asking for?  
Are there units?

Equations have = signs!

- 1) A family of 5 people has \$200 to spend on fishing rods and fishing licenses. They spend a total of \$20 on licenses. Assuming they buy 5 identical rods, which is the maximum amount they can spend on each rod?

$$\begin{array}{r}
 \boxed{\text{Rods}} + \boxed{\text{Licenses}} = \boxed{\text{Total}} \\
 5x + 20 = 200 \\
 \quad \quad \quad -20 \\
 \hline
 5x = 180 \\
 \frac{5x}{5} = \frac{180}{5} \\
 x = 36
 \end{array}$$

They can spend \$36 on each rod

- 2) Johnny wants to organize a group of friends to go to a karaoke studio this Friday night. Johnny must pay \$30 to reserve a private karaoke room plus \$5 for each person in the group. She also wants to have snacks for the group, which costs \$2 per person. How many people can be in the group in order for the total cost to be \$65?

$$\begin{array}{r}
 \text{fee to reserve} + \text{admission} + \text{snacks} = \text{total} \\
 30 + 5x + 2x = 65 \\
 30 + 7x = 65 \\
 -30 \quad -30 \\
 \hline
 7x = 35 \\
 \frac{7x}{7} = \frac{35}{7} \\
 x = 5
 \end{array}$$

5 people can be in the group

- 3) Justin Bieber got his hair cut and bought some hair gel from his hairdresser for a total of \$250. The haircut was \$175 and the hair gel tubes were \$6.25 each. How many tubes of hair gel did he buy?

$$\begin{array}{r}
 \text{haircut} + \text{gel} = \text{total} \\
 175 + 6.25x = 250 \\
 -175 \quad -175 \\
 \hline
 6.25x = 75 \\
 \frac{6.25x}{6.25} = \frac{75}{6.25} \\
 x = 12
 \end{array}$$

Justin bought 12 tubes of hair gel

- 4) The Saline Department of Water charges a monthly fee of \$6 for 800 gallons of water used. You are also charged \$0.25 per gallon of water for each gallon over 800 gallons. Last month, your family's water bill was \$12. How many total gallons of water did your family use last month?

$$\begin{array}{r}
 \text{Monthly rate} + \text{overage} = \text{total bill} \\
 6 + .25x = 12 \\
 -6 \quad -6 \\
 \hline
 .25x = 6 \\
 \frac{.25x}{.25} = \frac{6}{.25} \\
 x = 24 \text{ (beyond the allotted 800 gal)}
 \end{array}$$

Your family used 824 gallons total

- 5) A class of 42 students and 2 teachers plan a trip to Tim Hortons. The class has raised \$214 for the trip. It is \$3 for each person to go and bus rental is \$55. With the remaining money, the class can invite guests to fill the remaining seats on the bus. Find the number guests the class can invite.

$$\begin{array}{r}
 \text{Students + teachers} + \text{bus} + \text{guests} = \text{total} \\
 3(44) + 55 + 3x = 214 \\
 132 + 55 + 3x = 214 \\
 187 + 3x = 214 \\
 -187 \quad -187 \\
 \hline
 3x = 27 \\
 \frac{3x}{3} = \frac{27}{3} \\
 x = 9
 \end{array}$$

9 guests can be invited

**Homework:** "What is Green and Famous?" wkst.

Adapted: "What is Green and Famous?" wkst. Pick 3 problems (not 1, 3, 5, or 7)