

## TWO - STEP EQUATIONS WITH WORD PROBLEMS

---

We will solve real world scenarios together on the this side.

Now you can apply the IPS strategy with the problems on your side.

Carrie had \$32 when she got to the carnival. After riding 6 rides, she had \$20 left. Find the price for each ride.

85 students went on a field trip. Three buses were filled and 25 students traveled in cars. How many students were on each bus?

| <b>I</b>             | <b>P</b>       | <b>S</b>                                                                           | <b>I</b> | <b>P</b> | <b>S</b> |
|----------------------|----------------|------------------------------------------------------------------------------------|----------|----------|----------|
| started with<br>\$32 | $32 - 6x = 20$ | $32 - 6x = 20$ $\underline{-32 \quad -32}$                                         |          |          |          |
| 6 rides              |                | $\underline{5x = 20}$ $5 \quad 5$                                                  |          |          |          |
| \$20 left            |                | $x = 4$                                                                            |          |          |          |
|                      |                | <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">\$ 4</span> |          |          |          |

Chuck jogged the same distance on Tuesday and Friday, and 8 miles on Sunday, for a total of 20 miles for the week. Find the distance Rick jogged on Tuesday and Friday.

You bought a magazine for \$5 and some notepads for \$3. You spent a total of \$26. How many notepads did you buy?

| <b>I</b>                                   | <b>P</b>      | <b>S</b>                                                                                                   | <b>I</b> | <b>P</b> | <b>S</b> |
|--------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| same distance for 2 days<br><br>8mi Sunday | $2x + 8 = 20$ | $2x + 8 = 20$<br>$\underline{- 8 \quad - 8}$<br>$2x = 12$<br>$\underline{2 \quad 2}$<br>$x = 6$            |          |          |          |
| total 20mi                                 |               | <div style="border: 1px solid red; border-radius: 50%; padding: 5px; display: inline-block;">6 miles</div> |          |          |          |

Susan bought 5 reams of paper at the store for a total of \$21. The tax on her purchase was \$1. Find the price for each ream of paper.

Willie rented a bike from Sarawong's Bikes. It cost \$17.50 plus \$5 per hour. If Willie paid \$47.50 then he rented the bike for how many hours?

| <b>I</b>         | <b>P</b>      | <b>S</b>                                                                                                       | <b>I</b> | <b>P</b> | <b>S</b> |
|------------------|---------------|----------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| 5 reams of paper | $5x + 1 = 21$ | $  \begin{array}{r}  5x + 1 = 21 \\  - 1 \quad - 1 \\  \hline  5x = 20 \\  5 \quad 5 \\  x = 4  \end{array}  $ |          |          |          |
| \$1 tax          |               |                                                                                                                |          |          |          |
| \$21 total       |               |                                                                                                                |          |          |          |
|                  |               | <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">\$4</span>                              |          |          |          |

Half of your baseball card collection got wet and was ruined. You bought 11 cards to replace some that were lost. How many did you begin with if you now have 24?

A wise man once said, "500 reduced by 4 times my age is 232." What is his age?

| <b>I</b> | <b>P</b> | <b>S</b> | <b>I</b> | <b>P</b> | <b>S</b> |
|----------|----------|----------|----------|----------|----------|
|          |          |          |          |          |          |

Ashley won 40 lollipops playing hoops at her school's game night. Later, she gave two to each of her friends. She only has 4 remaining. How many friends does she have?

**Exit Ticket:**

Create your own word problem that would require a two-step equation to solve. Write the equation. Solve.

| <b>I</b> | <b>P</b> | <b>S</b> | <b>I</b> | <b>P</b> | <b>S</b> |
|----------|----------|----------|----------|----------|----------|
|          |          |          |          |          |          |