

Math



Introduction to Word Problems

Many students find themselves tripped-up by word problems when it comes to math, but by identifying key words and following a few simple strategies, word problems become less of an obstacle.

Key Words in Word Problems:

Altogether, And, Total	Add
Left, Remaining, Decrease, Increase, Go up, Go down, Reduce, Grow, More	Subtract
Of, Altogether, Total,	Multiply
Each, Per	Divide

Five Steps to Solving Word Problems:

- 1 WHAT** - What does the problem want you to do?
- 2 HOW** - How will you do the problem?
- 3 HELP** - Set up the problem (formula, graph, table, etc.)
- 4 COMPUTE** - Do the math
- 5 CHECK** - Does the answer make sense?



Example:

Karen drives to work every day. It takes her 37 minutes to get to work and 43 minutes to get home. If she works five days each week, how long does she spend commuting to and from work?

<p>1. WHAT - What does the problem want us to find? Examine the question part of the problem.</p>	<p>The answer will be in hours or minutes.</p>												
<p>2. HOW - How do we solve the problem?</p>	<p>The problem asks how long she will spend commuting. There are two key words here, “And” and “Each,” which tell us to Add and Multiply.</p>												
<p>3. HELP - What help to we need?</p>	<p>We need to complete three steps to solve the problem:</p> <p>Part 1: Add the time it takes to get to work to the time it takes to get home.</p> <p>Part 2: Multiply the travel time (answer to Part 1) by 5 days a week.</p> <p>Part 3: Divide the total travel minutes in a week (answer to Part 2) by 60 minutes in order to get the answer in hours and minutes.</p>												
<p>4. COMPUTE – Part 1: Add Part 2: Multiply Part 3: Divide</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 33%;">Part 1</th> <th style="text-align: left; width: 33%;">Part 2</th> <th style="text-align: left; width: 33%;">Part 3</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">37min.</td> <td style="padding-left: 20px;">77min.</td> <td style="padding-left: 20px;">385÷60= 6.42</td> </tr> <tr> <td style="padding-left: 20px;"><u>+ 40min.</u></td> <td style="padding-left: 20px;"><u>x 5days</u></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">77min.</td> <td style="padding-left: 20px;">385min.</td> <td></td> </tr> </tbody> </table>	Part 1	Part 2	Part 3	37min.	77min.	385÷60= 6.42	<u>+ 40min.</u>	<u>x 5days</u>		77min.	385min.	
Part 1	Part 2	Part 3											
37min.	77min.	385÷60= 6.42											
<u>+ 40min.</u>	<u>x 5days</u>												
77min.	385min.												
<p>5. CHECK – Check to see if the answer is reasonable.</p>	<p>Is a travel time of 6 hours and 42 minutes a week a reasonable answer?</p>												

Source: Strategies for Solving Math Word Problems,
 Jerome Kaplan, 1990