SIMPLE ALGEBRA

What is simple algebra?

Simple algebra is the term used when **using expressions with letters or variables that represent numbers**.

Words can be changed into a **mathematical expression** by using the words, plus, exceeds, diminished, less, times, the product, divided, the quotient and many more.

A simple **algebraic expression** can be solved by filling in a number for the **variable**.

Word

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- Words can be changed into mathematical terms. Look at the following words and translate into mathematical terms:

Example:

Five times a number minus three → 5 · n - 3

Each word represents a mathematical term. Once this is done, the expression can either be left this way or solved if given a value for n.

- Word problems are also changed into expression in the same way.

Look at this word problem:

> Jack rented a movie. The store charged $1.99 for the first day and $.50 for each day after that. Jack had the movie for four days. Write an expression for the cost of renting a movie in terms of d, days.
>
> $1.99 for the first day and $.50 for each day after that means 1.99 plus .50 x d → the expression is 1.99 + .50d

This expression can be solved when 3 is substituted for d (the number of days Jack had the movie beyond the first day).
So, 1.99 + .50 x 3 = 1.99 + 1.50 = 3.49 or $3.49.

- Mental math can also be used to solve simple algebraic

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Try

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2. T

A number plus seven

3. Translate the word problem into an expression in terms of d, days:

Sharon rents a car that costs $89 for the first day and $50 for every day after that. She rents the car for d, days.

4. Solve with mental math:

$$7 \cdot n = 56 \qquad 11 + n = 20 \qquad 64 \div n = 8$$