Basic Algebra 1

Sec. 1-1 Variables

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Bas. Algebra 1 - 1-1 Variables

WARMUP

Simplify:

1. 9 / 9 — 1
2. 44 / 11 — 4
3. 20 / 22 — 10/11
4. 7 X (1 / 7) — 1
5. How much will 3 Big Macs cost if they are $2.79 each? — $8.37

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Objective: To simplify numerical expressions and evaluate algebraic expressions.

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Some vocabulary:

variable - a symbol used to represent one or more numbers.

numerical expression - an expression, such as $4.50 X 4, that names a number

variable expression - an expression that contains a variable, such as $4.50 X *h*

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The expressions 4 + 2 and 6 have the same value. How do we write this algebraically?

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The expressions 4 + 2 and 6 have the same value. How do we write this algebraically?

$$4 + 2 = 6$$

We read this "four plus two equals 6".

How would you write,
"four plus two DOES NOT equal 5."

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Substitution Principle
An expression may be replaced by another expression that has the same value.

So, if a = 3, solve the following:

1. 7a — 21
2. (3a) + 4 — 13
3. a - 5 — -2

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Examples:
Simplify:
1. 12 + (4 / 2) — 14
2. (3 + 2) / (6 - 1) — 1

Evaluate if $m = 1$ and $n = 2$
3. $(mn) + 4$ — 6
4. $m + (14n)$ — 29
5. $3n + 2m$ — 8

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Homework:

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