2.1 Variables and **Expressions**

p. 54 2/26/18

A **variable** is a letter or symbol that represents a quantity that can change.

Examples: Letter

a,b,x,U

A **constant** is a quantity that does not change.

Examples:

number

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An <u>algebraic expression</u> contains one or more variables and may contain operation symbols. So $p \times 7$ is an algebraic expression.

Algebraic Expressions	NOT Algebraic Expressions	
· 150 + y	85 ÷ 5	
35 × w + z	10 + 3 × 5	

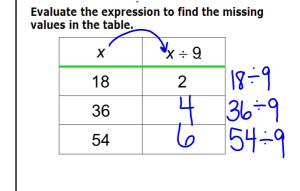
4+x

Evaluate the expression to find the missing values in the table. values expression $(5 \times)$ У 5.16 80 16 27 35

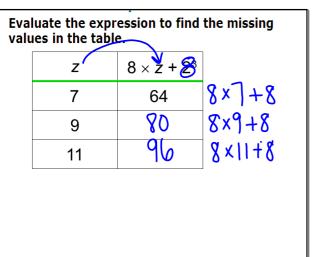
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Evaluate the expression to find the missing values in the table.

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	Z	$z \div 5 + 4b$	
	20	20	20:5+16
	45	25	45-5+16
	60	28	60÷5+16

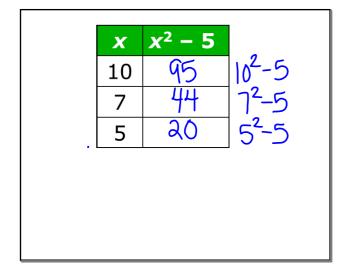


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Sep 23-10:54 AM

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A rectangle is 3 units wide. How many square units does the rectangle cover if it is 2, 3, 4, or 5 units long?

l	w	$l \times w$	
2	3	6	2.3
3	3	9	3.3
4	3	12	4.3
5	3	15	5.3

A rectangle is 4 units wide. How many square units does the rectangle cover if it is 3, 4, 5, or 6 units long?

l	w	$l \times w$	
3	4	12	3.4
4	4	16	4.4
5	4	20	5.4
. 6	4	24	6.4

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Evaluate each expression for the given value of the variable. 3h + 2 for h = 10 3(10) + 2 30 + 2 30 + 2

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Evaluate each expression for the given value of the variable. $2x^{2} \text{ for } \underline{x} = 3$ $2(3)^{2}$ 2(9) | 8

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Evaluate each expression for the given value of the variable.

$$\frac{t - 7}{20} \text{ for } t = 20$$

$$\frac{20 - 7}{13}$$

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Evaluate each expression for the given value of the variable. $\frac{c}{7} \text{ for } c = 56$

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Evaluate each expression for the given value of the variable.

$$3x + 17 \text{ for } x = 13$$

$$3(|3) + |7$$

$$39 + |7$$

$$56$$

Evaluate each expression for the given value of the variable.

$$5p \text{ for } p = 12$$

$$5(|2)$$

$$60$$

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