

Name: _____

Date: _____



Evaluating Algebraic Expressions

WARM-UP

Evaluate each numerical expression below:

$$3 \times 5^2 + 6$$

$$9^2 - 8 \times 10$$

$$3^3 \div 9 - 1$$

$$12^2 + 4^2 - 2^3$$

Name: _____

Date: _____



Evaluating Algebraic Expressions

EXIT SLIP

Evaluate each expression when $a=10$ and $b=15$

$$b - a$$

$$a^2 - b$$

$$2ab$$

$$3a + b$$

Name: _____

Date: _____



Evaluating Algebraic Expressions

PRACTICE PROBLEMS

Simplify each expression:

<p>#1 Evaluate the expression below when $g = 5$</p> $7 + g$	<p>#2 Evaluate the expression below when $h = 2$</p> $3 - h$
<p>#3 Evaluate the expression below when $m = 35$ and $n = 7$</p> $m \div n$	<p>#4 Evaluate the expression below when $m = 15$ and $n = 3$</p> $3m + 2n$
<p>#5 Evaluate the expression below when $g = 10$</p> $6g^2$	<p>#6 Evaluate the expression below when $y = 11$ and $w = 12$</p> $8y - 2w$
<p>#7 Evaluate the expression below when $k = 12$</p> $\frac{8k}{4}$	<p>#8 Evaluate the expression below when $x = 3$ and $y = 4$</p> $3x^3 + y$

Name: _____

Date: _____

Evaluating Algebraic Expressions Assessment*Select the correct answer for each question.*

1. Evaluate the expression when
 $a = 3$

$3a$

- a) 3
- b) 9
- c) 33
- d) 27

2. Evaluate the expression when
 $b = 9$

$b^2 - b$

- a) 9
- b) 18
- c) 72
- d) 81

3. Evaluate the expression when
 $c = 4$ and $d = 6$

$2c^2 + 3d$

- a) 32
- b) 50
- c) 64
- d) 82

4. Evaluate the expression when
 $x = 0.5$ and $y = 2$

$8x + 0.5y$

- a) 4
- b) 5
- c) 8.5
- d) 14

5. The cost of a taxi can be calculated using the expression $3 + 2.25m$ where the number of miles is represented using the variable m . If a ride is 6 miles, how much does it cost in all?

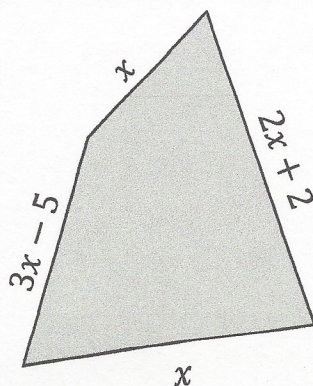
- a) \$6
- b) \$13.50
- c) \$16.05
- d) \$16.50

6. Select all of the expressions that have a value of 20 when $y = 3$

- a) $2y + 7$
- b) $7y - 1$
- c) $y + y^2 + 8$
- d) $3y^2 - 9$
- e) $2y + 6y - 4$

Answer the question below. Be sure to show all of your work.

Find the perimeter, in inches, of the figure when $x = 9$.



Name: _____

Date: _____



Evaluating Algebraic Expressions

WARM-UP

Match each algebraic expression to the word phrase.

$$10k$$

k less than 10

$$k - 10$$

The sum of k and 10

$$10 - k$$

The product of 10 and k

$$k + 10$$

The difference of 10 and k

Name: _____

Date: _____



Evaluating Algebraic Expressions

EXIT SLIP

The expression $5a + 3c$ can be used to find the cost of a adults and c children to attend the school play. What is the cost of 4 adults and 9 children to attend the school play?