

Group Work

- 1) The expression $2t^2 - 10$ can be used to determine the distance in feet, a falling object travels for a given time t , in minutes. How many feet will a falling object travel in 5 seconds?

Answer: _____

- 2) The surface area, S , of a right rectangular prism with length l , width w , and height h can be found using the formula below.

$$S = 2(lw + wh + hl)$$

What is the surface area, in square inches, of a prism with a length of 12 inches, a width of 9 inches, and a height of 2 inches?

A 300

B 258

C 150

D 92

- 3) Evaluate the expression for the given values.

$$2x + (3y + z^2)$$

$$x = 8$$

$$y = 10$$

$$z = 4$$

Answer: _____

Name: _____

Ms. Napolitano

Date: _____

CCSS: _____

Classwork: W2 D2_Evaluating Algebraic Expressions

1. Evaluate for $a = 6$ and $b = 4$.

$$2a^2 + 3b - 4a$$

- A. 12
- B. 20
- C. 48
- D. 60

2. A cube has edges of 8 inches. What is the volume of the cube? Use the formula $V = s^3$.

- A. 24 cubic inches
- B. 64 cubic inches
- C. 512 cubic inches
- D. 4,096 cubic inches

3. What is the value of the expression below?

$$5^2 + 6 - 4(2 + 3)$$

- A. 11
- B. 19
- C. 26
- D. 32

4. Evaluate for $c = 8$ and $d = 4$.

$$c^2 \times 2c \div d^3 + 10$$

- A. 14
- B. 26
- C. 656
- D. 4,106

5. A cube has edges of $\frac{1}{4}$ inch. What is the surface area of the cube? Use the formula $V = 6s^2$.

- A. $\frac{3}{8}$ square inch
- B. $\frac{3}{4}$ square inch
- C. $1\frac{1}{2}$ square inches
- D. $2\frac{1}{4}$ square inches

6. Evaluate: $6^2 \div 4 + 3 \times 8$

- A. $\frac{9}{14}$
- B. 33
- C. 48
- D. 96

7. What is the value of the expression below?

$$16 + 24 \div 2^3 \times 3 - 8$$

- A. 7
- B. 9
- C. 17
- D. 20