

Unit Three Expressions***MCC6.EE.2c******I can use the Order of Operations to evaluate expressions.*** DOK-2

1) $(15 + 1) \div 2 \cdot 3 + 10$

2) $16 \div 4 \cdot 3 - 6 + 4$

3) $6^3 \div (2 \times 6) + 64$

4) $167 + (13 - 4)^2$

- 5) Explain the Order of Operations and how it is useful in solving mathematical and real world problems.
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- DOK-4

I can evaluate expressions when given values for variables.

Evaluate each expression for the given values of the variable. DOK-2

6) $3n + 2$ for $n = 10$

7) $2x^2 + 5$ for $x = 3$

8) $10q + 2r$ for $q = 3, r = 5$

- 9) The formula for finding the Surface Area of a cube is
- $A = 6s^2$
- , where
- s
- is the length of one side of the cube. What is the surface area of a cube with side length of:

a) $\frac{1}{4}$ inches?

b) 5.1 meters?

c) 50 feet?

- 10) The formula for finding the Volume of a cube is $V = s^3$, where s is equal to the length of one side of the cube. What is the volume of the cube with side length of:
- a) 15 inches?
 - b) 2.5 meters?
 - c) 25 feet?

MCC6.EE.2

Write an algebraic expression for each written expression. DOK-2

- 11) 12 less than h
- 12) the total of y and 17
- 13) one third of x
- 14) the quotient of 3 and x
- 15) DOK-3 School lunch at Yum Yum Middle School costs x dollars. Write an expression for the situations below. What is the cost of lunch for:
- a) 3days?
 - b) 6 days?
 - c) 15 days?

MCC6.EE.3 and MCC6.EE.4

Determine whether each of the following pairs of expressions are equivalent. Some of them may not be equivalent. Be sure to justify your conclusions. DOK-4

- 16) $4y + 8$ and $4(y + 2)$
- 17) $5x + y$ and $y + 5x$
- 18) $8x + 2$ and $8(x + 2)$
- 19) $9x^2 + 27$ and $9(x^2 + 3)$
- 20) $3y^2 + 6x^2$ and $3(y^2 + 2x^2)$