

**Algebra Skills:**

**Evaluating an expression**

**Exponents and powers**

**Order of operations**

**Writing equations and inequalities**

**The real number line**

**Addition of real numbers**

**Subtraction of real numbers**

**Multiplication of real numbers**

**Division of real numbers**

**Distributive Property**

**Collecting Like Terms**

**Graphing Coordinates**

Main Ideas	Details
	A) $2^x$ when $x = 4$ B) $x^3$ when $x = 4$
	C) $(x+y)^3$ when $x = 2$ and $y = 1$
	D) $(x-y)^3$ when $x = 2$ and $y = 1$
	E) $(x-4)^2$ when $x = 10$
	F) $x - y^3$ when $x = 10$ and $y = 2$
	G) $x^2 - y^3$ when $x = 10$ and $y = 4$

A)  $(2x)^2$  when  $x = 3$       B)  $2x^2$  when  $x = 3$

C)  $(3x)^4$  when  $x = 2$       D)  $3x^4$  when  $x = 2$

Evaluate the expression	A) $5 + 10 - 2$ B) $10 \div 2 + 3 \cdot 4$
	C) $6 + 2 \cdot 4 - 3$ D) $12 \div 2 \cdot 4^2$
	E) $2 \cdot 3^2 \div 3$ F) $10 \div (3 + 2) + 9$
	G) $7[(18 - 6) - 6]$ H) $[10 + (3^2 \cdot 2)] \div 4$
	I) $\frac{10 \cdot 2}{3 + 2^3 - 1}$ J) $\frac{13 - 4}{18 - 4^2 + 1}$

Evaluate the expression  
for the given value of  
the variable

A)  $4+3x^2$  when  $x = 2$       B)  $5 \cdot 3x^2$  when  $x = 3$

C)  $4x^2 - 10$  when  $x = 2$       D)  $\frac{x}{2} + 4 \cdot 5$  when  $x = 10$

E)  $\frac{x-3}{2}$  when  $x = -13$       F)  $\frac{2x-6}{5}$  when  $x = 8$

G)  $\frac{3x-y}{5}$  when  $x = -10$   $y = 15$

H)  $\frac{2x^2-3}{y}$  when  $x = -3$   $y = 5$

Main Ideas	Details
Evaluate the expression	<p>A) <math>-5x</math> when <math>x = 2</math></p> <p>B) <math>x^3 - 2</math> when <math>x = -3</math></p> <p>C) <math>2x^2 - 3x</math> when <math>x = -3</math></p> <p>D) <math>2x + x^3</math> when <math>x = -2</math></p> <p>E) <math>-3x^2 + 2x - 5</math> when <math>x = 3</math></p> <p>F) <math> x - 3 </math> when <math>x = -3</math></p>



Simplify the expression  
by collecting like terms

A)  $5x + 2x$       B)  $-5x + 2x$       C)  $-5x - 2x$

D)  $3 + x + 7$       E)  $2 + x + x$

F)  $2x + 10 - 7x - 4$       G)  $-5 + 5x + 10 - 2x$

Simplify the expression

A)  $-2(3x + 1) + 5x$       B)  $3(2 - x) - x$

C)  $-4(x + 2) - 6x$       D)  $7x - 3x(x + 1)$

Main Ideas	Details
<p>Use the Coordinate plane to the right and answer the following questions</p>	<ol style="list-style-type: none"> <li>What is the ordered pair for A? _____</li> <li>What Quadrant is B in? _____</li> <li>What is the ordered pair for F? _____</li> <li>What is the ordered pair for K? _____</li> <li>What point is at (1, -3) _____</li> <li>What point is at (-3, 3) _____</li> </ol>
<p>Plot and label the following points on the coordinate plane to the left.</p>	<ol style="list-style-type: none"> <li>Label the 4 Quadrants</li> <li>M (2, -4)</li> <li>A (0, 4)</li> <li>T (-3, 2)</li> <li>H (-5, -4)</li> <li>R (6, 6)</li> <li>O (-7, 0)</li> <li>X (-1, 5)</li> </ol>
<p>Write an ordered pair for each of the following.</p>	<ol style="list-style-type: none"> <li>A point in Quadrant I _____</li> <li>A point in Quadrant II _____</li> <li>A point in Quadrant III _____</li> <li>A Point in Quadrant IV _____</li> <li>A point on the X axis _____</li> <li>A point on the Y axis _____</li> </ol>