UNIT 1 - Algebra 1 Review (Expressions/Equations/Inequalities)

SECTION 1 - Expressions

Review of Algebraic and Numeric Expressions

Date Period

Evaluate each expression.

1)
$$(7-2) \div 5$$

5)
$$(-6 \times 2) \div -3$$

9)
$$(4-3)(1-(3+5))\times 5$$

2)
$$(3+3)^2$$

6)
$$2 + 12 \div 2 + 1$$

10)
$$((-16 - (-2 + 1)) \times 2) \div 5$$

Evaluate each using the values given.

13)
$$y + z + 2$$
; use $y = -6$, and $z = 5$

14)
$$p(q \div 3 - p)$$
; use $p = -6$, and $q = -3$

16)
$$x(z+3)+1+3-y$$
; use $x=6$, $y=-5$, and $z=2$

18)
$$-3 \div 3(a + c(b + 5) - (-6 + a))$$
; use $a = 1$, $b = -6$, and $c = -4$

Simplify each expression.

19)
$$9x + 9 - 1$$

21)
$$-9 - 6(-\nu + 5)$$

23)
$$1 + 4(2 - 3k)$$

27)
$$-2(-6x-9)-4(x+9)$$

25)
$$7(1+9v)-8(-5v-6)$$

20)
$$10n - 4n$$

22)
$$-10(-8x+9)-8x$$

24)
$$-8v + 6(10 + 6v)$$

28)
$$9(7k+8)+3(k-10)$$

26)
$$-10(x-7)-7(x+2)$$

Simplify each expression.

1)
$$(5p^2-3)+(2p^2-3p^3)$$

9)
$$(-4k^4 + 14 + 3k^2) + (-3k^4 - 14k^2 - 8)$$

2)
$$(a^3 - 2a^2) - (3a^2 - 4a^3)$$

10)
$$(3-6n^5-8n^4)-(-6n^4-3n-8n^5)$$

19)
$$(3v^5 + 8v^3 - 10v^2) - (-12v^5 + 4v^3 + 14v^2)$$
 20) $(8b^3 - 6 + 3b^4) - (b^4 - 7b^3 - 3)$

20)
$$(8b^3 - 6 + 3b^4) - (b^4 - 7b^3 - 3)$$

27)
$$(4x^2 + 7x^3y^2) - (-6x^2 - 7x^3y^2 - 4x) - (10x + 9x^2)$$