

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Pre Calculus 11: HW Section 1a: Algebra Review#1**

1. Evaluate each of the following expressions:

a) $(9 - 5)4 + 3$	b) $(7 + 2)3 - 5$	c) $(7 + 3)(-3) + 11$
d) $4 + (7 - 10)3$	e) $-5 \times 3^2$	f) $2^3 + 5^2$
g) $3(4 - 2 \times 3)^2$	h) $42 + 3(4 - 8)^3$	i) $2(3 - 5 \times 3)^2$
j) $(32 \div 8 - 7)^4$	k) $3[(3 - 6)^3 + 5 \times 2]$	l) $-4[8 \div 4 + 3(3 - 6)^2]$

2. Solve for "x" in each of the following equations:

a) $3x + 5 = 11$	b) $20 = 15 + x$	c) $12 = 4 \cdot x \cdot 3$
d) $12 - x = 3 \times 6$	e) $18 = \frac{7 - 3x}{2}$	f) $44 = 20 - 13x$

g) $24 = 3 + (x - 1)2$	h) $32 = 8 - (x - 2)4$	i) $18 = -12 - (x - 1)(-4)$
j) $27 = \frac{17}{2}(3 + (x + 2)4)$	k) $16 = \frac{9}{2}(-10 - (x - 3)3)$	l) $4 = \frac{5}{2}(11 - 5(2 - x))$

3. Given each equation, isolate the variable "x". Show all your work and steps:

a) $A = B(C)(x)$	b) $B = A + x$	c) $C = A \cdot x \cdot B$
d) $C - x = AB$	e) $C = \frac{B - Ax}{D}$	f) $B = C + Ax$
g) $D = B - CAx$	h) $D = A(Bx - C)$	i) $E = C(x - B) + D$
j) $C = D(A)x^2$	k) $C = A + Bx^2$	l) $D = E(B) - x^3$