If needed review A.1 and A.2

Name: _____ **Date:** _____

MATH 208 **Quiz 1**

True or False

1) $a(b+c) = (b+c)a$ T

2) $3 + (x+y) = (3+x) + y$ T

3) $(3+x)y = 3x + 3y$ F

4) $a\frac{5}{5} = a$ T

5) $xy + 5 - 2 - 3 = yx$ T

6) $\frac{1}{3}(c+d)3k = 3c + 3d$ F

For problems 7 to 12, let $A = 3x - 4$, $B = x + 2$, $C = 2 - 3x^2$, and $D = x^3 + 8$.

7) $A + B + C + D$

$3x - 4$
$x + 2$
$-3x^2 + 2$
$x^3 + 8$

$x^3 - 3x^2 + 4x + 8$

8) $(B + C) - (A + C)$

$B - A$
$x + 2 - (3x - 4)$
$= -2x + 6$

9) $C \times D$

$(-3x^2 + 2)(x^3 + 8)$
$= -3x^5 + 2x^3 - 24x^2 + 16$

10) A^2

$(3x-4)(3x-4) = 9x^2 - 2(12)x + 16$
$= 9x^2 - 24x + 16$

11) What is the degree of A, B, C, and D?

A 1
B 1
C 2
D 3

12) What is the leading coefficient of A, B, C, and D?

A 3
B 1
C -3
D 1