Alg 1+ Multiplying: Monomial $\times$ Monomial \& Monomial $\times$ Polynomial Name: $\qquad$
Multiply the monomials. Use the review guide given to you to help. Circle your final answer. (** Make sure to realize that all variables with no exponents really have an exponent of 1 !!! It helps to write this in to begin the problem**)
1.) $2 x^{2} y^{6}$ - $4 x^{3} y^{4}=$
2.) $-3 x y^{4}$ - $5 x^{7} y^{2}=$
3.) $a^{2} b^{7} \cdot a^{4} b^{2}=$
4.) $7 a b c^{2} \cdot 2 a^{2} b=$
5.) $m^{2} n^{3} \cdot 2 m^{3} n^{8}=$
6.) $10 z^{3} \cdot 3 x^{3} z^{2}=$
7.) $-8 d^{3} e^{5} \cdot 2 d^{2} e^{7}=$
8.) $-4 a^{2} b \cdot-2 a^{7} b^{2}=$
9.) $5 x^{3} y^{2} z^{9} \cdot 2 x^{2} y z^{3}=$
10.) $11 m^{4} p^{9} \cdot 2 m^{2} p^{3}=$

Use the distributive property to simplify each. Use the review guide given to you to help. Be sure to write your polynomial in the correct form at the end (the term with the largest exponent comes first, and they are written in descending order from there, see your notes). Circle your final answer.
11) $5(2 b+2)=$
12) $7 a^{3}(2 a+6)=$
13) $6(3 x+3)=$
14) $4 n^{2}(2 n+7)=$
15) $7 x^{2}(5 x-1)=$
16) $8(3 n+3)=$
17) $6(8 x-7)=$
18) $6 x(4 x+3)=$
19) $6(n+5)=$
20) $8 k^{2}(6 k-5)=$
21) $5\left(3 k^{2}+3 k-3\right)=$
22) $3\left(8 x^{2}+5 x-3\right)=$
23) $7\left(5 p^{2}+p-6\right)=$
24) $2 v\left(v^{2}+8 v-5\right)=$
25) $7\left(4 n^{2}+4 n-6\right)=$
26) $3\left(2 k^{2}+3 k+2\right)=$
27) $3 p\left(7 p^{2}-5 p+7\right)=$
28) $7 b\left(2 b^{2}+4 b-2\right)=$
29) $5\left(3 x^{2}-6 x-8\right)=$
30) $3\left(7 n^{2}+8 n-7\right)=$

