

Name _____

8A CC Algebra 1

Date _____

Period _____

Take Home Quiz #6

****Show all work where possible****

Due: _____

****4 Points each****

1) Simplify: $-6x^2(3x^3y)$	2) Factor: $16g^3 - 20g^2 - 12g$
3) Simplify: $(5x + 2xy - y) - (4y + 10xy)$	4) Simplify: $7c - (-4c) - 2c$
5) Factor: $w^2 + 7w - 8$	6) Simplify: $-2m^2n(3m - 5n^2)$
7) Solve for d and <u>write the properties</u> : $47 = 4d + 7$	8) Simplify: $\frac{2a^2c + 4ac - 8c^2}{2c}$
9) Factor: $7n^5 + 14n^4 + 28n^2 - 35n$	10) Simplify: $\frac{12e^2f^6}{4e^4f^{-3}}$
11) Factor: $p^2 - 11p + 28$	12) Simplify: $(-2b^3 + 4b - 8) + (5b^3 - 7b^2 + 1)$
13) Factor: $2x^2 - 6x^4$	14) Simplify: $(x^2 - 3x + 7) + (3x^2 + 5x - 9)$

15) Simplify: $(-2a^2b^3)(4ab^5)(6a^3b^2)$	16) Simplify: $(2y^2)^4$
17) Simplify: $-3x(x - 4) - 2x(x + 3)$	18) Simplify: $(c + 8)(c - 5)$
19) Simplify: $(x - 6)^2$	20) Simplify: $(4x^2 - 5x + 2) - (2x^2 - 3x + 2)$
21) Simplify: $\frac{15x^3y - 25x^2y^2}{5xy}$	22) Simplify (by factoring): $\frac{x^2 + 5x - 24}{x + 8}$
<p>23) Given the following: $5b + 4b^2 - 3b^4 + 3$</p> <p>a) Write the polynomial in standard form: _____</p> <p>b) How many terms does the polynomial have? _____</p> <p>c) What is the degree of the polynomial? _____</p> <p>d) What is the leading coefficient of the polynomial _____</p>	
<p>24) Describe and correct the error that Nick made in simplifying the product :</p> $(2x + 7)(2x - 7)$ $4x^2 - 14x + 14x - 49$ $4x^2 - 28x - 49$	
<p>*25) Factor completely: $x^4 - 10x^2 + 24$</p>	