Name_____

AA2 2nd Semester Block Week 8 Warm-up

NO WORK = NO CREDIT!!!.....SHOW ALL WORK!

1. The variable ***y*** varies inversely as ***x***, and y = 8 when x = 3. a) Find the constant of variation, k. b) Find the equation for the relationship. c) Find y(exactly) if x = 5.	2. The variable ***c*** varies jointly as ***w*** and ***y*** and inversely as the cube of z, and c = 15 when w = 4, y = 10, and z = 2. a) Find the constant of variation, k. b) Find the equation for the relationship. c) Find c(exactly) if w = 5, y = 6, and z = 3.	3-7. Simplify. State domain restrictions. $\frac{x^2-x-12}{x^2-9} \cdot \frac{x^2+5x+6}{x^2-6x+8}$
4. $\frac{x^3-x}{x^2+4x+3} \div \frac{x^2-2x+1}{x^2+3x}$	5. $\frac{5x}{6} + \frac{x+6}{6}$	6. $\frac{4}{x-3} - \frac{x+5}{x^2-9}$

OVER ☺

7. Simplify $\frac{4x}{x-2}+\frac{5x}{2x+1}$	In 8-10, Solve, round to nearest hundredth if necessary. 8. $4x^2 = 8x$	9. $5872 = 34^{2x+1}$
10. $log_5(2x+1) = 3$		