Algebra II
Review Sections 9-1 & 9-2
(emphasis on 9-2)

Name _____

Name the undefined values for each problem. Remember, when in doubt…

1) $\frac{1}{x}+\frac{2}{x-8}$ 2) $\frac{x}{2x+5}-\frac{4}{x+2}$ 3) $\frac{3}{x^2-9}+\frac{3}{5}$ 4) $\frac{x-1}{x^2+5x-14}-\frac{6x}{5x-10}$

x ≠ _____ x ≠ _____ x ≠ _____ x ≠ _____

Simplify each expression. Remember…

Mult & Div.	**Add & Subt.**
1) factor	1) factor
2) cancel	2) find common denom.s
3) mult. across	3) simplify numerator
	4) check to see if numerator factors again
	5) write denominator for final answer

5) $\frac{-2w^3y}{15xz^5}\bullet\frac{25x^3}{14w^2y^2}$

6) $\frac{3}{x}+\frac{5}{y}$ 7) $\frac{2}{a+2}-\frac{3}{2a}$ 8) $\frac{a^5y^3}{wy^7}\div\frac{a^3w^2}{w^5y^2}$

9) $\frac{m}{m-n}-\frac{m}{n-m}$ 10) $\frac{1}{x^2+2x+1}+\frac{x}{x+1}$ 11) $\frac{n}{n-3}+\frac{2n+2}{n^2-2n-3}$

12) $\frac{n^5}{n-6}\bullet\frac{n^2-6n}{n^8}$ 13) $\frac{4a}{3bc}-\frac{15b}{5ac}$ 14) $\left(\frac{2xy}{x^2}\right)^3\div\frac{24x^3}{x^5}$

15) $\frac{3}{x+2}+\frac{4x+5}{3x+6}$

16) $\frac{7}{4x}-\frac{1}{3}-\frac{5}{6x}$

17) $\frac{9}{d-8}\bullet\frac{8-d}{15}$

18) $\frac{4z}{z-4}+\frac{z+4}{z+1}$

19) $\frac{12y}{y^2-9}-\frac{5}{y-3}$

20) $\frac{2}{3x-12}-\frac{3}{8-2x}$

21) $\frac{3}{y^2+y-12}-\frac{2}{y^2+6y+8}$

22) $\frac{5x-2}{x+2}+x$

23) $\frac{r^3}{a^2-25}\div\frac{2r}{5-a}\bullet\frac{ar+5r}{8}$