Name_____

Date_____

Advanced Algebra

Unit 5 Polynomials: Assignment #15

I can reduce Fractions:

Remember: You can only cancel factors that are EXACTLY the same when you have more than 1 term in the fraction.

1) $\frac{3x+12}{x+4}$	2) $\frac{x-5}{8x-40}$	3) $\frac{x^2-9}{x+3}$
4) $\frac{x^2-49}{3x-21}$	5) $\frac{x^2+2x}{x^2-9x}$	6) $\frac{x^2+8x+15}{x^2+7x+10}$
7) $\frac{x^2+4x-12}{x^2-5x+6}$	8) $\frac{x^2+9x+20}{x^2-25}$	9) $\frac{5x-15}{x^2+5x-24}$

Multiply the following out to its expanded form. You can use special patterns if you recognize them.:

1) (x-9) (x+9)	2) (x+2)(x-2)
3) $(x+5)^2$	4) $(x-3)^2$
5)$(x-4)^3$	6) $(x+6)^3$
7)$(x+1)^3$	8) $(3x+4)^2$
9) $(2x-1)^2$	10) $(3x+2y)^3$