Kerry Ojakian's MTH 31 Class
Handout #2

KEY:

1. "C" stands for "constant".

   May have $+$ in fron (meaning positive) or $-$ in front (meaning negative)

2. "$+0$" stands for quantity to goes to zero, but remains positive.

3. "-0" stands for quantity to goes to zero, but remains negative.

DETERMINATE FORMS.

1. $\dfrac{\pm C}{\pm\infty} = \pm 0$ (get sign usual way)
2. $\dfrac{\pm\infty}{\pm C} = \pm\infty$ (get sign usual way)
3. $\dfrac{\pm C}{\pm 0} = \pm\infty$ (get sign usual way)
4. $(\pm\infty)\cdot(\pm\infty) = \pm\infty$ (get sign usual way)
5. $(\pm C)\cdot(\pm\infty) = \pm\infty$ (get sign usual way)
6. $(-\infty)-(+\infty) = -\infty$
7. $(+\infty)+(+\infty) = +\infty$
8. $(C)^{(+\infty)} = +\infty$ if $C > 1$
9. $(C)^{(+\infty)} = +0$ if $0 < C < 1$
10. $(+0)^{(+\infty)} = +0$
11. $(-0)^{(+\infty)} = -0$
12. $(+\infty)^{(+\infty)} = +\infty$

INDETERMINATE FORMS.

1. $\dfrac{0}{0} =$???
2. $\dfrac{\pm\infty}{\pm\infty} =$???
3. $(0)\cdot(\pm\infty) =$???
4. $(+\infty)-(+\infty) =$???
5. $(\pm\infty)^{(0)} =$???
6. $(1)^{(\pm\infty)} =$???
7. $(0)^{(0)} =$???