# A TEN DAY SYLLABUS FOR PRECALCULUS

DAY 1:  Teach them that $\dfrac{a+b}{c}$ is $\dfrac{a}{c}+\dfrac{b}{c}$

DAY 2:  Teach them that $\dfrac{a}{b+c}$ is NOT $\dfrac{a}{b}+\dfrac{a}{c}$

DAY 3:  Teach them that $\dfrac{x}{\ln(x)}$ is NOT $\dfrac{1}{n}$

DAY 4:  Teach them that you can't solve $\sin(kx)=1$ by saying $x=\dfrac{1}{\sin(k)}$

DAY 5:  Remind them that $\dfrac{a}{b+c}$ is NOT $\dfrac{a}{b}+\dfrac{a}{c}$

DAY 6:  Show them a movie of a student sitting in a field, writing $(a+b)^2=a^2+b^2$ and then getting HIT BY A TRAIN

DAY 7:  Remind them that $\dfrac{a}{b+c}$ is NOT $\dfrac{a}{b}+\dfrac{a}{c}$

DAY 8:  Teach them that if the domain of a function *f* is the reals, the graph of $y=f(x)$ is not a blank pair of axes, that perhaps they should adjust the "window."

DAY 9: Teach them that $\dfrac{x}{y+x}$ is NOT $\dfrac{x}{z}+\dfrac{y}{z}$

DAY 10: Group work: Bring a trout to class.  Have them solve sin(kx)=1,  If they get $x=\dfrac{1}{\sin(k)}$, hit them with the trout.  Make it a big trout.