$$\dfrac{\dfrac{}{Or(Not(f(x1,0)+-1*x3<=-1),Not(f(x1,0)+-1*x3>=0))}\ \text{th-lemma}\quad \dfrac{\dfrac{}{f(x1,0)>=x3}\ \text{asserted}\quad \dfrac{}{(f(x1,0)>=x3)==(f(x1,0)+-1*x3>=0)}\ \text{rewrite}}{f(x1,0)+-1*x3>=0}\ \text{mp}\quad \dfrac{\dfrac{\dfrac{}{x3-f(x1,0)>=1}\ \text{asserted}\quad \dfrac{\dfrac{}{x3-f(x1,0)==x3+-1*f(x1,0)}\ \text{rewrite}}{(x3-f(x1,0)>=1)==(x3+-1*f(x1,0)>=1)}\ \text{monotonicity}}{x3+-1*f(x1,0)>=1}\ \text{mp}\quad \dfrac{\dfrac{}{x3+-1*f(x1,0)==-1*f(x1,0)+x3}\ \text{rewrite}}{(x3+-1*f(x1,0)>=1)==(-1*f(x1,0)+x3>=1)}\ \text{monotonicity}\quad \dfrac{}{(-1*f(x1,0)+x3>=1)==(f(x1,0)+-1*x3<=-1)}\ \text{rewrite}}{(x3+-1*f(x1,0)>=1)==(f(x1,0)+-1*x3<=-1)}\ \text{trans}}{f(x1,0)+-1*x3<=-1}\ \text{mp}}{False}\ \text{unit-resolution}$$