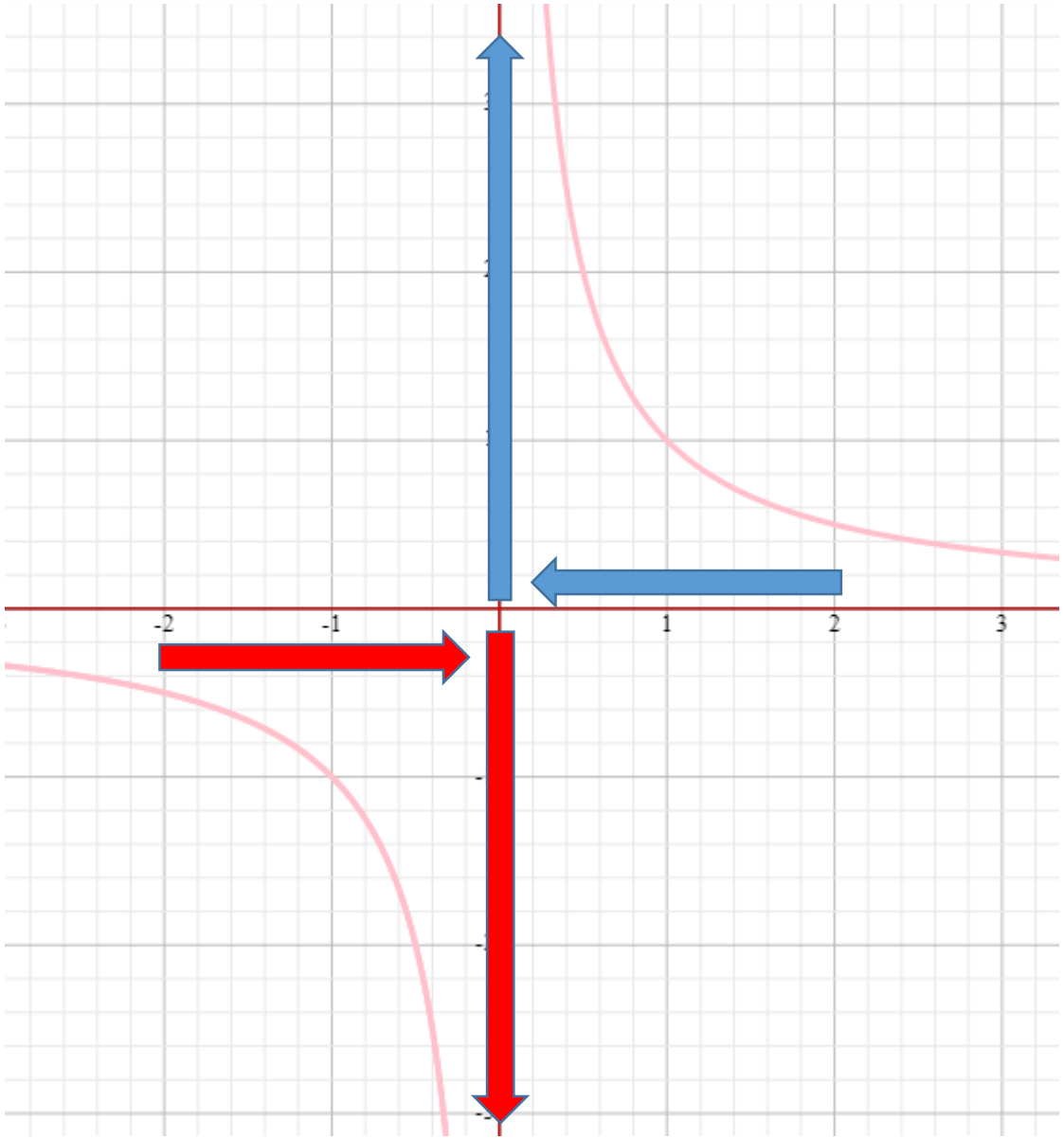

1. Notice that as the values of x move towards 0 from the right, (blue arrows) the values along the y axis go towards positive infinity. For example:
   when x=0.1, 1/0.1=10
   when x=0.01, 1/0.01=100
   when x=0.001, 1/0.001=1000 and so on

2. Notice that as the values of x move towards 0 from the left, (red arrows) the values along the y axis go towards negative infinity.
   For example:
   when x=-0.1, 1/-0.1=-10
   when x=-0.01, 1/-0.01=-100
   when x=-0.001, 1/-0.001=-1000 and so on

3. What 1. and 2. above tell us is that 1/0 does not have a value, since if you approach 0 from the right, you get infinity and if you approach zero from the left, you get negative infinity in the long run. There is no way to reconcile two infinities here. In many programming languages, you might see NaN if you try to divide by zero. (NaN=not a number)