4.3 Tech Lab

1. On the grid graph
    a) Use a calculator to graph $f(x) = \frac{10}{x^2+4}$ on the interval [0,5]
    b) Draw a secant line for *f(x)* when *x=1* to *x=4*

2. Calculate
    a) Estimate the slope of the secant line.

    b) Find the average rate of change of *f(x)* on the interval [1,4]

    c) Find a value *c* on the interval [1,4] such that $f'(c)$ is equal to the average rate of change found in part b.

3. What theorem guarantees the existence of *c*?