

In-Class Assignment 2 (Due: 9/27/21)

Directions: When instructed, try to solve the following problems. This assignment is due at the end of class.

1. Find the domain of the function $f(x) = \frac{\sqrt{1-x}}{\sqrt{x}}$.

2. Find the range of the function $f(x) = 2\sqrt{x+4}$.

3. Graph the piece-wise-define function $f(x) = \begin{cases} \sqrt{x}, & \text{if } x > 0 \\ 1, & \text{if } x = 0 \\ -1, & \text{if } x < 0. \end{cases}$

4. The following table shows the average population of the City of Santa Cruz.

Year	2012	2013	2014	2015	2016	2017
Population	60,319	61,245	62,045	62,752	63,310	63,993

Find the average rate of change of the population from 2013 to 2016, including units.