In-Class Assignment 1 (Due: 9/24/21)

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

1. The table below shows the price of the three most popular donuts at Ferrell's Donuts in Santa Cruz.

Donut	Buttermilk Crowns	Bear Claw	Chocolate Iced Cake
Price	$2.95	$2.95	$1.50

   Is price a function of the type of donut? Is the type of donut a function of the price?

2. Does the equation $x^2y^2 = 25$ define a y as a function of x? Does the equation define x as a function of y?

3. A function g is defined by the formula $g(m) = \sqrt{m-4} + 1$.

   (a) Evaluate $g(5) + 2g(12)$.

   (b) Solve $g(m) = 2$.

4. Using a graphing calculator, GeoGebra, or Desmos[1], graph the following equations. Sketch each graph, and determine if the graph represents a function.

(a) $x^2 = y^2$

(c) $y^3 = |x|$

(b) $y^7 = x$

(d) $x^2 + 8xy = \sqrt{y}$

5. Which of the *functions* in problem 4 are one-to-one?

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[1]Download the app for your smart device or visit www.GeoGebra.org or www.Desmos.com in the browser.