

Assignment #1-3

Secondary 3 Honors

PreCalc Book:

Pg. 48 – 50 3, 9, 12, 13, 17, 18, 20, 43, 47, 51, 56, 61, 66, 70, 73

Review Problems:

1. Simplify the algebraic expressions:

a. $3x - 4(2x + 3) - 5x(x + 7)$ b. $(3x - 4)(2x + 1)$ c. $(x - 4)^2$

2. Given the function $g(x) = 2x^2 - 3$ find...

a. $g(-2)$ b. $g(x+1)$ c. $\frac{g(x+h) - g(x)}{h}$

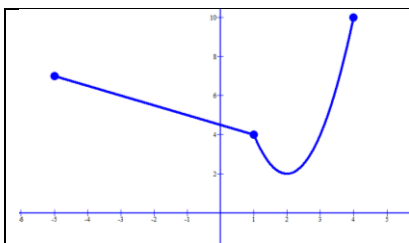
3. Given the piecewise function: $f(x) = \begin{cases} 2x - 3 & x > 0 \\ -x^2 & x \leq 0 \end{cases}$

- a. Graph the function $f(x)$ b. Find $f(-2)$ c. Find $f(1)$
d. Is the graph of $f(x)$ continuous?

4. Find the Domain for the following functions:

a. $f(x) = 3^x$ b. $g(x) = \sqrt{4 - x}$ c. $h(x) = \frac{3x - 2}{x^2 - 25}$

5. Given the graph of $f(x)$, graph the following:



a. $f(|x|)$

b. $|f(x)|$

c. $f(|x|) + 2$