

§P.5: Functions

- 1.] Determine whether the relations (presented with a table of values) represent y as a function of x .

Input, x	10	7	4	7	10
Output, y	3	6	9	12	15

Input, x	-2	0	2	4	6
Output, y	1	1	1	1	1

- 2.] Let $f(x) = 4x^2 - 3x + 5$. Find each function value below:

a.) $f(2)$

b.) $f(x - 2)$

c.) $f(x) - f(2)$

- 3.] Let $f(x) = \sqrt{x} - 4$ and $g(x) = 2 - x$. Determine all x values where $f(x) = g(x)$.

4.] What is the domain of the function $f(x) = 1 - 2x^2$

5.] What is the domain of the function $f(x) = \sqrt{3x - 5}$

6.] What is the domain of the function $f(x) = \sqrt[3]{x + 4}$

7.] What is the domain of the function $f(x) = \frac{1}{x^2 - 4x}$

8.] What is the domain of the function $f(x) = \frac{\sqrt{x + 2}}{x - 10}$

9.] What is the domain of the function $f(x) = \frac{x + 2}{\sqrt{x - 10}}$

10.] What is the domain of the function $f(x) = \sqrt{4 - x^2}$