

Precalculus, Chapter 1, Basic Functions

1.2.1 (**Functions**): I can use the definition of a function and the Vertical Line Test to decide if a relation is/is not a function. I can find the domain and range of a function.

P. 94: 3, 8, 10, 18, 20

1.2.2 (**Functions**): I can identify & describe discontinuities of a function (including hidden behavior due to grapher failure).

P. 94: 22, 73

1.2.3(**Functions**): I can identify & describe the interval on which a function is increasing, decreasing, and/or constant. I can also identify a function's extrema and whether the graph is bounded.

P. 94: 26, 30, 38, 46, 74-76

1.2.4 (**Functions**): I can analyze function characteristics such as symmetry, asymptotes, and end behavior.

P. 94: 47, 52, 57, 62, 64

1.3.1 (**Functions**): I can recognize the graphs of 12 basic functions and describe the characteristics of each.

P. 106: 13-25 all, 35-39

1.4.1 (**Functions**): I can build new function from basic functions using addition, subtraction, multiplication and division. I can determine the domain & range of the new function.

P. 116: 4, 6, 45-48

1.4.2 (**Functions**): I can build new functions using composition and find the domain, range, and graph. I can also decompose a new function into its original components.

P. 116: 11, 12, 15, 18, 21, 23-29, 49

1.5.1 (**Functions**): I can determine whether a function has an inverse and express it symbolically (using function notation for inverses) and/or graphically (if it exists).

P. 126: 9, 11, 14, 20, 24, 25, 34, 36, 39, 43

1.6.1 (**Functions**): I can translate, reflect, and compress a basic function using the Graph Translation Theorem.

P. 136: 8, 17, 18, 43-54