

8/23/2017 Class Notes

Please do diagnostic test (just before “Preview of Calculus” in textbook) **a.s.a.p**
and let me know if you have problems.

A sample:

B) 1. Find equation of line that passes through (2,-5) and

a) has slope -3

b) is parallel to x-axis

c) is parallel to y-axis

d) is parallel to $2x-4y=3$

e) passes through (1,-3) also

A) 8c: Solve $x^2 - x - 12 = 0$

Please study “Preview of Calculus” -- we discussed a lot of it on Monday.

Chapter I, Section1: Functions and Models

If Mathematics is the language and tool with which we understand nature,
then functions and models are how we translate nature to mathematics.

Function: A rule that assigns to each element in one set (called **domain**) to exactly one element to another (called **co-domain**). (without “exactly one” it is just a *mapping*). The set of images is called **range**.

Machine that takes input x to output $f(x)$

Can be represented verbally, numerically, visually and algebraically.

Vertical line test: which of these graphs represent a function?



Look at average temperature chart. Find range, domain, maximum value, minimum value, point at which temperature is 68 degrees.