Math 10: Unit 7 (Chp 7) Solving Linear Equations

Unit 7.1: Solving by Graphing

A) What is a linear system?

B) Why do we graph?
-gives a visual picture of the relationship between the equations

-for linear equations…there are 3 possible solutions:

i) 1 solution

ii) no solution

iii) infinite solutions

C) How can we *predict* the possible number of solutions for a linear system of equations?

-look at slope-intercept form: $y=mx+b$

D) How to solve a linear system of equations by graphing?

-step 1) equations should be in the form: y=mx+b
2) graph
3) look at intersection points

-note: sometimes, you may need to estimate the intersection point

Ex: solve by graphing: x+2y=-4 and x-y=5

Try and solve by graphing:
i) x+2y=-4 and x+2y=2

ii) y=-x-5 and -2x+y=-5

iii) 4y=3x+24 and 4y-3x=24

-do pg 287 #2, 4-6, 9, 10, 11