Math 8E: Unit 4.2: Linear Systems

1. What is a ‘linear system’?

-when graphed, they make a straight line.

Ex:

-points on the graph are called ‘ordered pairs’…and look like (x, y) where ‘x’ and ‘y’ are any real number. Ex: (3, 2), (-3, 1.5)

1. How to do graph a linear equation?

-step 1) decide what is the ‘input’ (independent variable; ‘x’ on the graph) and what is the ‘output’ (dependent variable; ‘y’ on the graph).

-step 2) table of values

-step 3) dots on the graph, connect the dots

Ex: Owen owns the YouTube channel ‘Watch me play Minecraft’. He gets paid $0.03 per view from each unique IP address. Draw a graph of Owen’s income

Ex: Melissa has a webpage design business. She charges a consultation fee of $100 and then $80 per hour of work. Suzanne also has a webpage design business. She charges $90 per hour. Mathew needs a webpage for his business ‘Canucks Souvenir Shop’. At what point is Melissa a better deal, and when is Suzanne a better deal?

Ex: graph y = 2x-3

-do WB pg 127 #4, 5, 7-9(left column), 11

-MMS9 pg 172 #13, 16