Week four algebra supplement 3.2, 3.3, 3.4

ELG’s:

F.4 Write arithmetic sequences both recursively and explicitly, model situations, and translate between the two forms.

A.7 Create equations in two variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

Part One: F.4

Find the next two terms in each recursive sequence and write a rule to follow the sequence.

1. 3, 9, 15, 21, …
2. -3, 6, -12, 24…
3. 1.7, 1.2, 0.7, 0.2…
4. 384, 192, 96, 48, …

Take each of the sequences above and plot them on their own coordinate graph.

Part two: A.7

Describe the graphs below as if someone was walking somewhere.

Distance

Distance

Time

Time

Part Three: One A.7

1. Jo mows lawns after school. She finds that she can use the equation P = -300 + 15N to calculate her profit.
   1. Give some possible real-world meanings for the numbers -300 and 15 and the variable N.
   2. Invent two questions related to this situation and then answer them.
   3. Solve the equation P = -300 + 15N for the variable N.
   4. What does the equation in 7c tell you?

Graph the following linear equations:

1. 2. 3.