Week Five Supplement Sections 3.4, 3.5, 3.6

ELGs:

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

F.2: Calculate and interpret rates of change in context of situations.

A.8/9: Solve linear equations in one variable and justify processes and solutions.

Part 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.

Part Two F.2

1. Use the equation w = 1.4t – 29, where t is the temperature and w is the wind chill, both in °F, to approximate the wind chill temperatures for a wind speed of 40 miles/hour.
   1. Find w for t = 32°
   2. Find t for a wind chill of w = - 8
   3. What is the real-world meaning of 1.4? What is the real-world meaning of -29?

Part Three A.8/9

Solve for the variable:

1. 5x – 9 = 45
2. ½ x – 10 = 200