Lesson 5.1.3

5-34. See below:

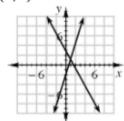
- a. Answers vary but should be close to 0.83.
- b. Approximately 228 cm. Since DeShawna measured to the nearest centimeter, a prediction rounded to the nearest centimeter would be reasonable.
- c. Approximately 72 cm.
- d. Approximately 166 meters.
- e. Approximately 138 meters, approximately 114 meters.

5-35. See below:

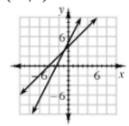
- a. 10(0.555) = 5.55 feet
- b. 10(0.555)(0.555) = 3.08 feet
- c. $10(0.555)^5 = 0.527$ feet

5-36. See graph below:

a.(1,1)



b.(-1,3)



5-37. See below:

a. 144, 156, 168, 180

b. 264 stamps.

c. t(n) = 12n + 120

d. n = 31.67; She will not be able to fill her book exactly, because 500 is not a multiple of 12 more than 120. The book will be filled after 32 months.

5-38. They are not on the same line; $m_{AB}=-\frac{1}{5}$, $m_{BC}=-\frac{1}{3}$, $m_{AC}=-\frac{1}{4}$.

5-39. See below:

a.
$$y = -3x + 7$$

b.
$$y = -x - \frac{2}{5}$$