Linear Function Word Problems - Guided Lesson

Complete the following problems:

1) It has been observed that a particular nail's growth is directly proportional to time. When we last measured, the nail was 3 mm and 3.5 mm exactly one week later. If the nail continues to grow at this rate, determine the function that represents the nail's growth and graph it.



2) Alex has a bicycle. He borrows his bicycle from Fred's Bicycle. The bicycle rental charge is \$20 per day plus \$0.30 per mile travelled. Determine the equation of the line that represents the daily cost by the number of miles travelled and graph it. If a total of 20 miles were travelled in one day, how much is the rental cost?

3) In an hour 0.6 liters of water dripped from a leaky water tap. Make a table of values for time and capacity and determine the equation that represents the rate of water leaking. Represent the equation graphically.