Intro to 3.4: Write equations from situations

For #1-6, read the situation and create a graph. Then read the situation again, and write an equation.

1. You currently have $40 in a savings account. You get a job and steadily put $20 into the account each week.

   ![Saving Money Graph]

   Equation: \( y = 20x + 40 \)

2. There are 3 people in line for concert tickets. 2 more people show up every minute.

   ![Concert Tickets Graph]

   Equation: \( y = 2x + 3 \)

3. You have $140 in savings. You get a new puppy and must spend $5 every week on food.

   ![Spending Money Graph]

   Equation: \( y = -5x + 140 \)

4. You open your lamp store with 90 lamps and sell 10 lamps each week.

   ![Lamp Inventory Graph]

   Equation: \( x = -10x + 90 \)
5. You start off the quarter with a semester grade of 66 percent. Every week your grade increases by 3%.

   Grade in Math

   Equation: \( y = 3x + 66 \)

6. You start off the quarter with a semester grade of 60 percent. Your grade increases by 3% every 2 weeks.

   Grade in Math

   Equation: \( y = 1.5x + 60 \)