7. [7 points]
   a. [4 points] Zoey, a zoologist, is studying the population of giraffes near a lake. She notices that
      the number of giraffes near the lake fluctuates in a sinusoidal manner over a 24 hour cycle. The
      giraffe population reaches a minimum of 30 giraffes at 7:00am every day, and rises to a maximum
      of 50 giraffes at 7:00pm every day. Let $G(t)$ be a sinusoidal function modeling the number of
      giraffes at the lake $t$ hours after 6:00am.
      Find a formula for $G(t)$.

      Answer: $G(t) =$

   b. [3 points] Zoey also studies the population of elephants in the area. Let $E(t)$ be a sinusoidal
      function modeling the number of elephants at the lake $t$ hours after 6:00am. A portion of the
      graph of $E(t)$ is shown below.

      Give the exact values of the next two times $t$ when this model predicts there will be the same
      number of elephants near the lake as there are at $t = 2.25$ (8:15am). You do not need to show
      work, but limited partial credit may be awarded for work shown.

      Answer: $t =$

      Answer: $t =$