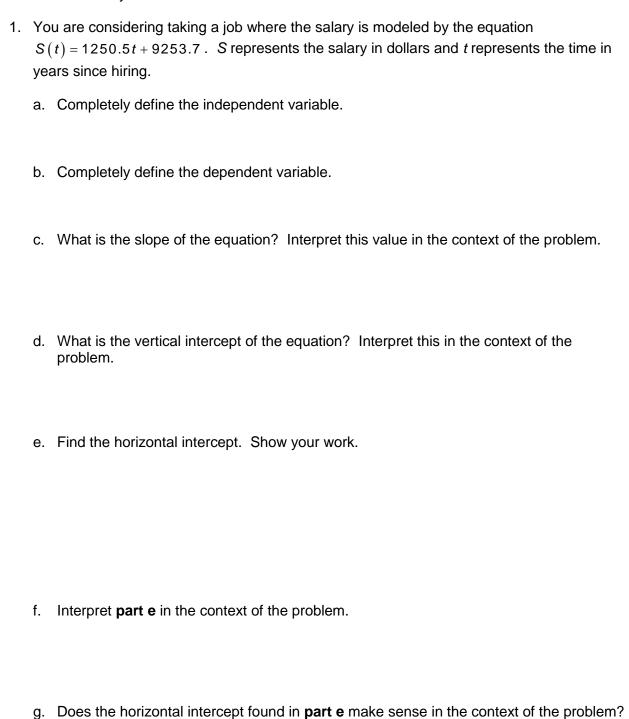
## TRS 92: Finding and Interpreting Intercepts

Refer back to Day 25 Homework.

Explain.



- 2. A student is watching the snow on her porch melt over time, which can be modeled by the equation A(t) = 33.36 1.2t. Let t be the time in days that she has been watching, the independent variable, and let A be the amount of snow left in inches, the dependent variable.
  - a. What is the vertical intercept? Interpret this in the context of the problem.
  - b. What is the slope? Interpret this value in the context of the problem.
  - c. Determine the horizontal intercept. Show your work.

- d. Interpret **part c** in the context of the problem.
- 3. A museum worker is in charge of counting the number of pamphlets available to the tourists. Let *A*, the dependent variable, be the amount of pamphlets left in the holder and let *t*, the independent variable, be the time in hours that have passed since the museum opened.
  - a. Interpret the coordinates (0,75) in the context of the problem.
  - b. Interpret the coordinate (7.5,0) in the context of the problem.
  - c. Interpret a slope of -10 in the context of the problem.

- 4. The number of dogs in an animal shelter can be modeled by the equation D(t) = -20t + 400. Let t represent the time in weeks and let D represent the number of dogs in the shelter.
  - a. Evaluate D(4). Show your work.
  - b. Interpret part a in the context of the problem.
  - c. Solve D(t) = 150. Show your work.

d. Interpret part c in the context of the problem.