

# Modeling Linear Equations and Inequalities

A charity fundraiser raised \$1200 by selling t-shirts at \$10 each and bookbags for \$25 each.

- 1) Write a linear equation that represents this.
  
  
  
  
  
  
  
  
  
  
- 2) Graph the function. (Let  $y$  = t-shirts,  $x$  = bookbags; solve for  $y$  using increments of 20)
  
  
  
  
  
  
  
  
  
  
- 3) Based on the graph, if the charity sold 10 bookbags, how many t-shirts did it sell?
  
  
  
  
  
  
  
  
  
  
- 4) If 100 t-shirts were sold, how many bookbags were sold?
  
  
  
  
  
  
  
  
  
  
- 5) What are the units of each of the coefficients in part a?