A company packages fruit baskets of different weights and ships them to customers. The company charges a flat fee for packaging the baskets. The total packaging and shipping cost in dollars, y, of a fruit basket weighing x pounds is represented by the line on the graph below.



- a. What is the *y*-intercept of the line on the graph?
- b. What does the *y*-intercept of the line represent in this situation?
- c. What is the slope of the line on the graph? Show or explain how you got your answer.
- d. What does the slope of the line represent in this situation?
- e. Write an equation that represents the line on the graph.
- f. Use the equation you wrote in part (e) to determine the weight, in pounds, of the heaviest fruit basket that could be packaged and shipped for \$50. Show or explain how you got your answer.