

# Hiker's Coffee

Name \_\_\_\_\_

Date \_\_\_\_\_ Per \_\_\_\_\_

1. Make a detailed, labelled graph using appropriate scales for the axes.

No. of people in family:	Pounds of coffee used:	Predicted Value	Residual Value
5	25		
8	30		
6	28		
7	31		
11	50		
10	45		
5	28		
7	35		
10	49		
6	35		
8	40		
7	37		
9	50		
12	55		
10	50		

- Sketch a line of best fit for the graph; that is, find the straight line that best fits the data.
- Find the equation for your line of best fit.
- Calculate and plot the residuals to prove your line is really the line of best fit.
- Do you think your equation is a good fit? Why or why not?
- Use your equation to determine how much coffee would be needed for a group of 27 people.

