**10C – RF7 V2 Relations & Functions – Equations of Linear Relations**

**Part I:**

1. Determine the equation of the line.
	1. Has a slope of $\frac{-5}{4}$ and passes through the point (-4, 7).

**Part II:**

1. Vickie is planning a party for her Grandma’s 100th birthday. The caterer charges a fixed amount plus an additional charge for each person who attends. The party will cost $750 if 40 people attend and $1450 is 110 people attend.
	1. Determine the equation that relates the cost of the birthday party to the number of people attending.
	2. Suppose 75 people attend the party. What will the total cost be?
	3. After the party was over, the invoice for the party was $1950. How many people attended the party?

 

**Part III:**

1. The difference between two numbers, *a* and *b*, is 5.
	1. Create a table of values and graph the relation.
	2. Write an equation in **General Form** to relate *a* and *b*.
	3. Use the graph to list 3 pairs of numbers that have a difference of 5.