**Sample Prompts for Exploring Functions and Graphing**

*Use these samples, modify them, or create your own prompts for Exploring Functions and Graphing.*

1. Advanced scenario: Annie is planning a business meeting for her company. The cost of the meeting room is $270 and each lunch costs $41. How could she figure out the total cost of the meeting?
2. Beginner scenario, complete the front page only
   * Use these 3 points to complete the page: (3,7), (5, 11), (6, 13)
   * Hint: look for the relationship between each x and y
3. Advanced scenario, complete the front and back
   * y = 3/4 x - 8
   * Hint: Start anywhere on the front or back. Work from there.
4. Sample equations
   * y = 3x – 2
   * y = - ¾ x + 5
   * y = -x + 2
   * y = 2/3 x – 4
5. Beginner scenario: A painter rented a wallpaper steamer for $10 for per hour.
   * As the number of hours increases, what happens to the rental cost?
   * How much would 9 hours cost? Find this answer by looking at the graph.
   * If I have $80, how long can I rent the wallpaper steamer?
6. Beginner scenario (abstract): Carefully draw a line that passes through (6, 6) and (10, 8). Then use that line to complete the rest of the front of the sheet.
   * Hint: What other points do you see on the line?
   * When x has a value of -2, what is the value of y?
7. Beginner scenario, complete the front page only:
   * For a meeting I spent $48. I rented a projector for $40 and bought 2 boxes of Girl Scout cookies for $8.
   * The next month, I expected a larger group and spent $56-- $40 for the projector and $16 for 4 boxes of Girl Scout cookies.
   * How much would I spend for the meeting if I bought 5 boxes of cookies?
8. Advanced scenario, complete the front and back:
   * Hartley opened a food truck business to sell food on the street. On day 2, the business earned $112. On day 5, the business earned $367. Hartley assumes that the earnings will continue to increase at the same rate. How much will the business earn on day 10? (from GED® practice test)