# Linear, Quadratic and Exponential Worksheet 1

| x | f(x) |
|---|------|
| 1 | 35 |
| 2 | 36 |
| 3 | 37 |
| 4 | 38 |

**Table**
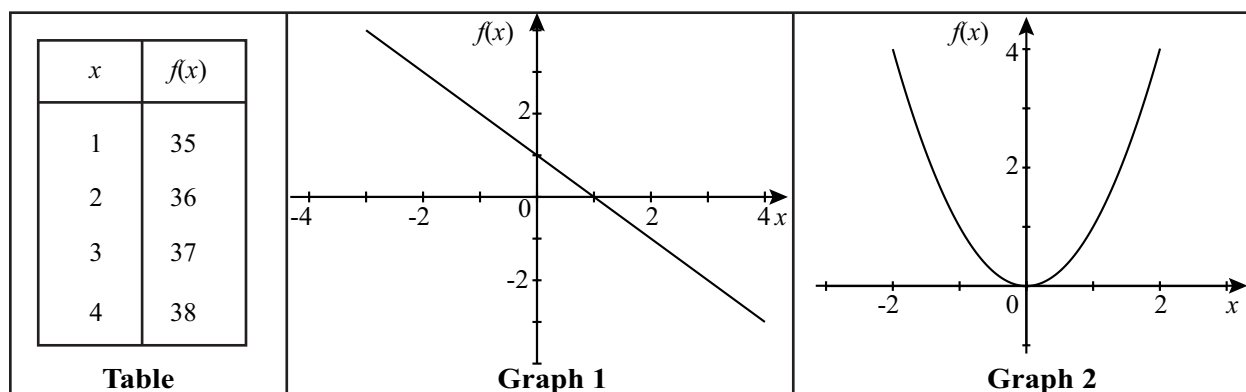


**Graph 1**



**Graph 2**

1. Find the formula of $f(x)$ given in the above table

2. Find the $x$-intercept of the above function.

3. Which function grows faster $y = x^3$ or $y = 3^x$.

4. What is the equation for the Graph 1?

5. What is the equation for the Graph 2?

6. With every minute that your sister runs, her heart rate (per minute) starts at 50, then becomes 60, then 70, then 80, and then 90. Find a function that models this?

7. During your first year you baked 2,000 cookies and the next year, you made 3,000. The next year was 4,000. What function could model this success (assuming that $x = 0$ your first year)?

8. What kind of sequence is 2, 3, 4, 5, 6, 7...?

9. What kind of sequence is 10, 20, 40, 80...?

10. How is an exponential function different from a linear function?