Read each problem **very carefully** before starting to solve it. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [4 points] Suppose that $y = f(x)$ is an exponential function some of whose values are given in the following table.

x	-1	0	1	2	3
y		150	100		

   Fill-in the blank boxes of the table and find $f(20)$.

2. [4 points] The points $(-3, 1)$ and $(2, 13)$ are on the graph of the exponential function $y = f(x)$. Find a formula for $f(x)$.

3. [4 points] Your little sister is 8 years old and your parents want to invest in an account that would allow her to make a deposit to buy a house when she moves to college at age 18. If the account has interest rate 1.2% compounded monthly, how much should they invest now to have $50,000 available for her when she moves to college?