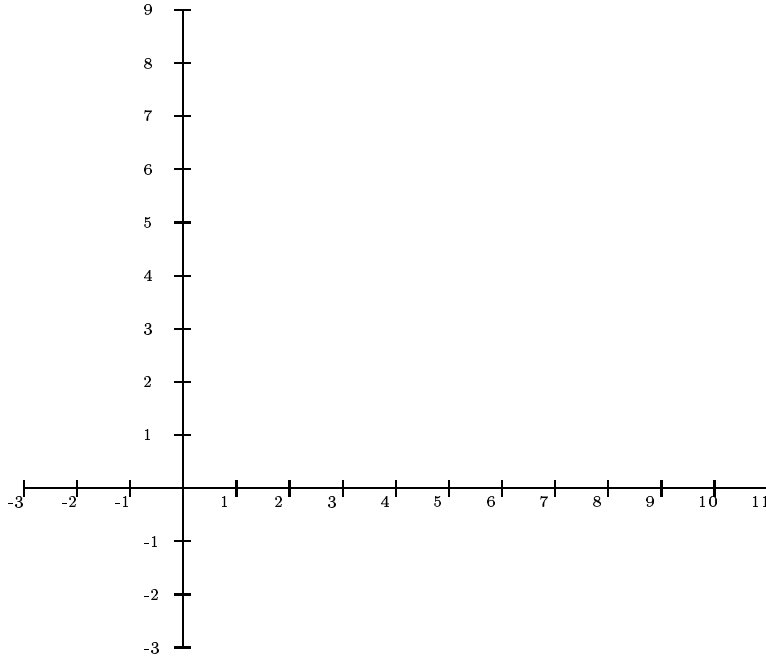


QUIZ 1

Name _____

1. A baby weighing 7 pounds at birth loses 7% of her weight in the 3 days after the birth and then, over the next 4 days, returns to her birth weight. During the next month, she steadily gains 0.5 pound per week. Sketch a graph of the baby's weight on the axes below making sure to accurately label the axes.



2. The average daily profit resulting from telephone marketing calls by an employee of a certain company can be modeled by

$$P(c) = 0.04c^3 - 3.1c^2 + 71.1c - 315.5$$

when c calls are made daily.

- (a) Find $P(20)$ and interpret the answer
- (b) Somewhere between 0 and 25 there exists a value for c which will cause $P(c) = 180$. Find (approximately) this value of c .