## Math 1

1. The math department sponsors a Math Family Fun Night each year. In the first year, there were 35 participants. In the third year, there were 57 participants.

Identify the variables in this situation: $x=$ $\qquad$ $y=$ $\qquad$
a. Write an equation to predict how many participants at any given year.
b. How many participants are predicted for the $5^{\text {th }}$ year?
2. Lynn is tracking the progress of her plant's growth. Today the plant is 5 cm high. The plant grows 1.5 cm per day.

Identify the variables in this situation: $x=$ $\qquad$ $y=$ $\qquad$
a. Find an equation that represents the plants height after any given number of days.
b. How tall is the plant after 9 days?
c. When will the plant be 14 cm tall?
3. Your gym membership costs $\$ 33$ per month after an initial membership fee. You paid a total of $\$ 228$ after 6 months.

Identify the variables in this situation: $x=$ $\qquad$ $y=$ $\qquad$
a. Write an equation that gives you the total cost related to the months of your gym membership.
b. Find the total cost after 9 months.

