**More Practice: Linear Equation Word Problems**

**y = mx+b**

1. 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.

A. Find an equation that represents the plants height after any given number of days.

B. How tall is the plant after 9 days?

2. A plane loses altitude at the rate of 5 meters per second. It begins with an altitude of 8500 meters. The plane’s altitude is a function of the number of seconds that pass.

A. Write an equation modeling this situation.

B. Use your equation to find out how much time will pass before the plane will land (hint: what is the altitude when the plane lands?)

3. An internet service provider charges $18 per month plus an initial set –up fee. One customer paid a total of $81 after 2 months of service.

A. Write an equation modeling this situation.

B. What is the initial set-up fee?

C. How much does it cost after 5 months of service?

4. Your gym membership costs $33 per month after an initial membership fee. You paid a total of $228 after 6 months.

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.

5. All tickets for a concert are the same price. The ticket agency adds a fixed fee to every order. A person who orders 5 tickets pays $93. A person who orders 3 tickets pays $57.

A. Write an equation relating the total cost to the number of tickets purchased.

B. How much do 4 tickets cost?