**Lesson 2-5, Part 1: Solving Equations Using the**

**Subtraction Property of Equality**

***Part I Directions: For each word problem below, write an equation and use the subtraction property of equality to solve them. Make sure to SHOW ALL STEPS (as shown in class)!***

1. This year, the Eagle Pride Hop-A-Thon fundraising event raised $5,789, which is about $2,348 more than last year’s total. How much did Eagle Pride raise in last year’s Hop-A-Thon event?
2. In basketball, a player often gets a +/- rating for their effectiveness in a game. In today’s game, Stevenson Crash, a point guard for the Hollywood Fakers [ ;)] earned a +4 rating. His total overall rating over his past two games (including today’s game) is -17. What was Steve’s effectiveness rating in his last game?

Bonus question: Is Stevenson Crash as effective a player on the Hollywood Fakers as he was on the Fenix Solars, when he would average an effectiveness rating of about +20 over any two games? If no, which team should he *REALLY* be playing for?

1. If Gina left her office and took the elevator up 15 floors to arrive on the 37th floor, what floor is her office on?
2. After encountering a poisonous octopus at the bottom of the ocean floor, a scuba diver moved up 5ft to take a picture of it out of harm’s way, but is still about 13 feet below the surface of the ocean. How many feet below the surface of the ocean was the scuba diver when she was at the bottom of the ocean floor?
3. A sleep debt tally is a way to tally how many hours of sleep your body has missed over a span of time, and allows an individual to determine how many hours of sleep they must catch up on in the future. After cramming on catch-up work in the last few days before the trimester ended, a 7th grader finally got to sleep for 12 hours straight last night. However, his/her sleep debt is still 3 hours less than it should be if he/she were all caught up on sleep (i.e. -3). What was this 7th grader’s original sleep debt before his/her sleep marathon last night?
4. Eliza deposited $860.50 into her bank account. However, her bank statement balance still reads

$-123.00. What was her bank balance before her deposit?

1. By the end of the second day of sale, an Ariana Grande (featuring Justin Bieber) concert sold 864 tickets, which was about 321 tickets more than it did on the first day. How many tickets were sold on the first day?

Bonus Question: How many tickets were sold altogether over both days?

1. Ms. Chayaril--[she’s Ms. Tharayil’s evil twin (yes there can be an even more evil version of Ms. Tharayil ;p ) in an alternate universe]--really wanted to buy tickets to a Justin Timberlake concert. However, when she looked online to purchase some tickets, she saw that tickets to his concert cost $325 dollars for good seats, which was about $195 more expensive than her budget (or thought was reasonable). What is the maximum price Ms. Chayaril was willing to pay for those Justin Timberlake concert tickets?

***Part II: Write your own word problems for the following equations. Oh, and SOLVE FOR THE VARIABLE! ☺***

1. a + 54 = -26
2. n + 762 = 8,356