

Problem of the Day: Solve the equation.  
 $3(2x + 1) = 3(4x - 3)$   
 $3x + 12 = 9x - 36$   
 $12 = 6x - 36$   
 $48 = 6x$   
 $8 = x$

Plan for the Day: Collect signed tests & POTD  
 Get new weekly homework  
 Integer quiz update/ take (if needed)  
 Finish notes from yesterday  
 More practice with writing equations  
 Objective: We will be able to write equations from story problems.  
 Happy Birthday to Caleb Davis!!

Example 3: Write and solve the equation.  
 Six times a number increased by three is 15 less than nine times the number. What is the number?  
 $6x + 3 = -15 + 9x$   
 $3 = -15 + 3x$   
 $18 = 3x$   
 $6 = x$

Example 4: Write and solve the equation.  
 One cell phone carrier charges \$40 for service and \$15 for every gigabyte of data used. Another company charges \$30 for service and \$20 for every gigabyte of data used. For how many gigabytes of data do the two companies charge the same amount?  
 $40 + 15x = 30 + 20x$   
 $40 = 30 + 5x$   
 $10 = 5x$   
 $x = 2$

Example 5: Write and solve the equation.  
 Chad goes to Sonic during happy hour to get his friends some small limeades for \$0.85 and gets a jumbo popcorn chicken for \$5 for himself. Marcus goes the next day to get the same number of people small sweet teas for \$0.60 and gets a family pack of mozzarella sticks for \$8. How many drinks do they both order if they spend the same amount of money?  
 $5 + 0.85x = 8 + 0.60x$   
 $5 + 0.25x = 8$   
 $0.25x = 3$   
 $x = 12$