Lesson 3.8 - Using Algebraic Expressions to Represent an Equation

Class Notes – Translate each sentence into an equation and solve.

LP#1 If 3 times a number is added to 4, the result is 19. Find the number.	If 7 is subtracted from 6 times a number, the result is -25. Find the number.
LP#2 If four times a number is decreased by 2, the result is 26. Find the number.	The sum of 8 and 5 times a number is 53. Find the number.

LP#3	Heather had put some money aside in a an
Some people got on an empty bus at its first stop. At the second stop, 3 people got on. At the third stop 5 more people got on. At the fourth stop, 10 people got off, but 4 people were still on the bus. How many people got on at the first stop?	envelope for household expenses. Yesterday she took out $20 for groceries. Today a friend paid back a loan and Heather put the $34 in the envelope. Now she had $43 in the envelope. How much was in the envelope at the start?
LP#4	
Three friends each put in the same amount of money to buy a gift. After they spent $2 for a card and $31 for the gift, they had $6 left. How much money had each friend put in originally?	Michael had completed 5 less than three times as many lab experiments as David. If Michael has completed 13 experiments, how many experiments has David completed?

Review – Solve each first-degree equation and check. If you do not solve an equation, explain.

R#1 If a number is added to twice the number, the result is -15. What is the number?	If a number is subtracted from three times the number, the result is -8. What is the number?
R#2 If the product of some number and 5 is increased by 12, the result is seven times the number. Find the number.	Ricardo gained 15 pounds over the winter. He went on a diet and lost 28 pounds. Then he regained 5 pounds and weighed 177 pounds. How much did he weigh originally?
R#3 Mr. Chee deposited $80 into his checking account. Then, after writing a $23 check for gas and a $90 check for his child's day care, the balance in his account was $67. How much was in his account before he made the deposit?	There were 18 cookies in Magan's cookie jar. While she was busy in another room, her children ate some of the cookies. Magan bought three dozen cookies and added them to the jar. At that point she had 49 cookies in the jar. How many cookies did her children eat?