Math 8   Name_____

Mid Mod 4 Study Guide   Date_____

1) For a field trip 19 students rode in cars and the rest filled nine buses. How many students were in each bus if 208 students were on the trip?

2) Wilbur wanted to make note cards by cutting pieces of paper in half. Before starting he got three more pieces to use. When he was done he had 12 half-pieces of paper. With how many pieces did he start?

3) Emily won 101 lollipops playing horseshoes at the county fair. At school she gave three to every student in her math class. She only has 8 remaining. How many students are in her class?

4) The sum of three consecutive numbers is 63. What is the smallest of these numbers?

5) Ryan rented a bike from Arjun's Bikes. It cost $12 plus $7 per hour. If Ryan paid $26, then he rented the bike for how many hours?

6) A wise man once said, "300 reduced by 4 times my age is 40." What is his age?

7) Kayla bought a magazine for $4 and two notepads. She spent a total of $8. How much did each notepad cost?

8) Elisa spent half of her weekly allowance on clothes. To earn more money her parents let her wash the car for $6. What is her weekly allowance if she ended with $15?

Without solving, identify whether each of teh following equations has a unique solution, no solution, or infinitely many solutions.

9) $-7(x + 7) - 3 = 6x - 39$

10) $-9 - 3x = -3(1 + x)$

11) $8(m - 8) = -32 + 4m$

12) $26 + 8b = -(3b + 7)$

13) $-(-3 - n) = 3 + n$

14) $-(6b - 3) - 7 = -6b - 4$