

I. Choose the best answer for each question. SHOW YOUR WORK WERE REQUIRED

1) Which statement is modeled by $2p + 5 < 11$?	2) Which is NOT a solution of the inequality $5 - 2x \geq -3$?
a) The sum of 5 and 2 times p is at least 11. b) Five added to the product of 2 and p is less than 11. c) Two times p plus 5 is at most 11. d) The product of 2 and p added to 5 is 11.	(a) 0 (b) 2 (c) 4 (d) 5
3) Which statement can be modeled by $x + 3 \leq 12$?	
a) Sam has 3 bottles of water. Together, Sam and Dave have at most 12 bottles of water. b) Jennie sold 3 cookbooks. To earn a prize, Jennie must sell at least 12 cookbooks. c) Peter has 2 baseball hats. Peter and his brothers have fewer than 12 baseball hats. d) Kathy swam 3 laps in the pool this week. She must swim more than 12 laps.	

II. Solve each application of linear inequality. YOU MUST SHOW YOUR WORK!

- 4) Your local bank offers free checking for accounts with a balance of at least \$500. Suppose you have a balance of \$516.46 and you write a check for \$31.96. How much do you need to deposit to avoid being charged a service fee?
- 5) Daniel had \$25 to spend at the fair. If the admission to the fair is \$4 and the rides cost \$1.50 each, what is the greatest number of rides Daniel can go on?
- 6) The sophomore class is putting on a dance to raise money. It cost \$700 to rent the Havelock Tourist Center that they plan to use. If they charge \$15 for each ticket, how many tickets do they need to sell in order to raise at least \$1000?
- 7) Kevin has earned \$25 for mowing the yard. He plans to download songs off of iTunes that cost \$0.75 each. How many songs can he download and still have \$13 left to spend?
- 8) Triniti had \$500 in a saving account at the beginning of the summer. She wants to have at least \$200 in the account by the end of the summer. She withdraws \$25 each week for food, clothes, and movie tickets. How many weeks can Triniti withdraw money from her account?
- 9) Joan needed \$100 to buy a graphing calculator for her math class. Her neighbor will pay her \$5 per hour to babysit and her Father gave her \$10 for mowing the lawn. What is the minimum amount of hours she will need to babysit in order for her to buy her calculator?
- 10) David earns \$5.95 per hour working after school. He needs at least \$215 for his purchase of a used gaming system. What is the minimum amount hours must he work to reach his goal?