1. What is the difference between an expression and an inequality?

2. Ms. Underwood wrote, "Eight less than three times a number is greater than fifteen," on the board. If x represents the number, write an inequality that represents the statement. (You do not have to solve this one ☺)

$3x - 8 > 15$

3. Hannah has a cell phone plan that charges \$0.07 per minute plus a monthly fee of \$19.00. She budgets \$29.00 per month for total cell phone expenses without taxes. What is the maximum number of minutes Hannah could use her phone each month in order to stay within her budget?
   a. Define the variable. x = maximum # of minutes
   b. Write an inequality/equation to express the situation.
   c. Solve the inequality.
   d. Write a sentence that includes the answer in context of the problem.

$.07x + 19 \leq 29$

$-19 \quad -19$

$.07x \leq 10$

$\frac{.07x}{.07} \leq \frac{10}{.07}$

$x \leq 142.857\ldots$

Hannah can talk maximum of 142 minutes

4. The sum of three consecutive ODD integers is 39. Find the three numbers.

$x + (x+2) + (x+4) = 39$

$3x + 6 = 39$

$-6 \quad -6$

$3x = 33$

$x = 11$

the #s are 11, 13, 15

5. Dakota is saving to purchase a new pair of bowling shoes that will cost at least $49. He has already saved $29. What is the least amount of money he needs to save for the shoes?
   a. Define the variable. x = least amt of $ needed to save
   b. Write an inequality/equation to express the situation.
   c. Solve the inequality.
   d. Write a sentence that includes the answer in context of the problem.

cost ≥ 49

$x + 29 \geq 49$

$x \geq 20$

he needs 20 more saved

6. Mack has $600 in a savings account at the beginning of the summer. He wants to leave at least $150 in his account at the end of the summer. He withdrawals $30 per week for food, gas, and Redbox. How many weeks can Mack withdraw money from his account?
   a. Define the variable. x = # weeks Mack can withdraw
   b. Write an inequality/equation to express the situation.
   c. Solve the inequality.
   d. Write a sentence that includes the answer in context of the problem.

Amt in save ≥ required

$600 - 30x \geq 150$

$-600 \quad -600$

$-30x \geq -450$

$\frac{-30x}{-30} \geq \frac{-450}{-30}$

$x \leq 15$

He can withdraw for up to 15 weeks

7. Peyton has $25,000 in his bank account. Every month he spends $1,500. He does not add money to the account. How much money will Peyton have in his account after 8 months?
   a. Define the variable. x = # months, money left after 8 months
   b. Write an inequality/equation to express the situation.
   c. Solve.
   d. Write a sentence that includes the answer in context of the problem.

$25000 - 1500x$