Coordinate Algebra Big 20 (#3)

Circle your final answer.

Monday (8/27/18)

1. Amy handed out 79 donuts on National Donut Day. She still had 147 left to give out. Write and solve an equation to find out how much she started with.

2. Write and solve an equation that represents the following:

    30 less than a number is equal to 49.

3. You are bored in class (not math class – because you are NEVER bored in there!) – but while you are bored you calculate that there are 432 hours until the next school holiday. How many days is it until the next break?

4. Pikes Peak in Colorado is 14,115 feet high. How many meters is this?

5. Solve for v:

    $$-10=-14v+14v$$

Tuesday (8/28/18)

6. The number 8.54321… is an Irrational number. Circle the more precise measurement:
    a. 8.5 miles
    b. 8.54 miles
    c. 8.543 miles
    d. 8.5432 miles

7. The Bakersfield Bombers Basketball team went through 11,276 ounces of Gatorade this season. How many gallons is this?

8. Solve for x:

    $$2(4x-3)-8=4+2x$$

9. Solve for p:

    $$14=-(p-8)$$

10. Define a variable and write an equation to model the following situation:

    Friendship's soccer team purchased uniforms and equipment for a total cost of $912. The equipment cost $612, and the uniforms cost $25 each. How many uniforms did the school purchase?

Wednesday (8/29/18)	**Thursday (8/30/18)**

Wednesday (8/29/18)

11. Solve for k:

$$-18-6k=6(1+3k)$$

12. Fred has grown a LOT in the past year. On October 1st this year, Fred was 165.1 centimeters tall, 7.62 centimeters taller than last year. How tall, in feet, was Fred when he was measured this year?

13. Define a variable and write an equation to model the following situation:
   An admission to a water park is $14.50 per person, and there is a one-time registration fee of $5. If you have less than $100 in your pocket, how many people can go to the water park?

14. Define a variable and write an equation to model the following situation:
   Juan's cell phone company charges $35 a month for phone service plus $0.50 for each text message. How many text messages does Juan send in a month if his bill was $52?

15. Write an inequality for x that would give this rectangle a **_perimeter_** of at least 300 ft.

x+5ft

3ft

Thursday (8/30/18)

16. Solve for v:

$$6(6v+6)-5=1+6v$$

17. Define a variable and write an equation to model the following situation:
   The total cost for 8 bracelets, including shipping was $54. The shipping charge was $6. What was the cost of each bracelet?

18. Duck a'lorange for 100 people (a gourmet meal for sure!) calls for 50 ducks, each having an average weight of 35 ounces. How many pounds of duck does this require?

19.Define a variable and write an equation to model the following situation:
   Mina bought a plane ticket to New York City and used a coupon for 15% off the ticket price. If her ticket cost $750, how much was the original price of the ticket?

20. Define a variable and write an equation to model the following situation:
   Lucas bought a refrigerator. He paid no more than $875 for the total cost which included sales tax at a rate of 8% and an additional, untaxed delivery charge of $35. What was the original cost of the refrigerator?