9TH GRADE WORD PROBLEMS   SCHOOL:_____
Write your final answer in the blank(s) provided on the right. **Be sure to include unit labels where applicable.**

1. Find two numbers such that one is (7/5) times the other, and their sum is 156.   1. _____   _____

2. Find the measure of the angle whose complement multiplied by 9 is 6 more than its   2. _____
   supplement.

3. The cost of a cell phone talk and text plan per month is $59.99 for the first 450 min.   3. _____
    then $0.45 per min. after that. If the bill one month was $185.99, how many **total**
    minutes was the phone used that month?

4. In 1940, the average size of a farm in the United States was 174 acres. In a recent   4. _____
    year, the average size of a farm in the US had increased to 420 acres. What is the
    percent increase? (round to the nearest tenth of a percent)

5. A couple is having their wedding reception at the Gallery reception hall. They have   5._____
    $1500 to spend on the reception and may not spend more than this. The reception
    hall charges a $100 set up/cleanup fee plus $17 per person. Find the greatest number of
    people that they can invite and still stay within their budget. Your answer should be
    a whole number.

6. On an NBA team the two forwards measure 6' 8" and 6' 6" tall and the two guards   6. _____
   measure 6' 0" and 5' 9" tall. How tall should the center be if they wish to have a
   starting team average height of at least 6' 5"? (your answer should be in the form of an inequality AND in
   feet and inches format.)

7. Two cars leave Indianapolis, one traveling east and the other west. After 3 hours,   7. _____ _____
   they are 297 miles apart. If one car is traveling 5 mph faster than the other, what is the speed of each?

8. The measure of the largest angle of a triangle is 80° more than the measure of the   8. ____ _____ _____

   smallest angle, and the measure of the remaining angle is 10° more than the smallest

   angle. Find the measure of each angle.

9. A pizza restaurant recently advertised two specials. The first special was a   9. _____
   12-inch pizza for $10. The second special was two 8-inch pizzas for $9. Determine
   the better buy.

10. A 46-foot piece of rope is cut into three pieces so that the second piece is three   10. ____ ____ _____
    times as long as the first piece, and the third piece is two feet more than seven
    times the length of the first piece. Find the lengths of all three pieces.