1. Find two numbers such that one is \( \frac{7}{5} \) 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 supplement. 2. _____________

3. The cost of a cell phone talk and text plan per month is $59.99 for the first 450 min. 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? 3. ______________

4. In 1940, the average size of a farm in the United States was 174 acres. In a recent 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) 4. ______________

5. A couple is having their wedding reception at the Gallery reception hall. They have $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. 5. ______________
6. On an NBA team the two forwards measure 6’ 8” and 6’ 6” tall and the two guards 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, 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 $80^\circ$ more than the measure of the smallest angle, and the measure of the remaining angle is $10^\circ$ more than the smallest angle. Find the measure of each angle.

9. A pizza restaurant recently advertised two specials. The first special was a 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 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.