7th Grade Math – Mr. Miller *Homework 7.3*

Finding the Base

Write an algebraic equation for each question below, and then solve it. Be sure to show all work done in the proper format.

[1] 75% of what number is 84?

[2] 132 is 11% of what number?

[3] 0.4% of what number is 12?

[4] What is 30% of 470?

[5] 16% of what number is 420?

[6] 80 is 160% of what number?

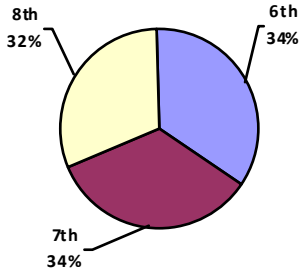
[7] 2% of what number is $2\ ^{3}/_{5}$?

[8] What is 8% of 175?

Use the circle graph below, showing the percent of the school population in each grade, to answer each of the following. Show all work done to support your answer.

[9] If there are 306 seventh graders, how many students would be in the entire school?

[10] Use your answer from problem [9] to determine how many eighth graders would be in the school.



Answer each of the following word problems, by writing a simpler question first like those in problems [1] to [8], and from that question writing and solving an algebraic equation. Show all work done to support your answer.

[11] Brianne has hit safely 27 times this season. If she has hit safely 36% of the time, how many times has she been to bat?

[12] To get a mortgage, you need to make a down payment of at least 5%. If you have $12,700 to use for a down payment, what is the most expensive house that you could buy?

[13] The New York Rangers won only 30% of their games this past season. If they played 82 games, how many did they actually win?