Quiz Review answer key Name:_____

Mrs. Rodgers is in charge of buying the soda for the soda machine in the commons. She conducted a survey that asked the students what kind of soda they preferred: Coke or Mountain Dew. Here were her results.

Drink Preferences

	Grade 6	Grade 7	Grade 8
Coke	40	35	45
Mountain Dew	35	50	40

Tell whether the statement is accurate based on the information in the table. Explain your answer.

1. 5 more 8th graders prefer Coke to Mountain Dew.
Yes, 45-40 = 5

2. The ratio of 8th graders who prefer Coke to Mountain Dew is 8 to 9.
No, the ratio was 45 to 40 which reduces to 9 to 8, not 8 to 9

3. 50% of the students surveyed prefer Coke.
No, there were 49% or 120 that preferred Coke out of 245 surveyed.

4. 8/9 of the 8th graders prefer Mountain Dew.
No, it was 40 out of 85 eighth graders or 8/17

5. 10/17 of the 7th graders prefer Mountain Dew.
Yes, it was 50/85, which reduces to 10/17

6. What percent of students at each grade level prefer Mountain Dew?
6th Grade: 47% = 35/75
7th Grade: 59% = 50/85
8th Grade: 47% = 40/85

7. What percent of the students surveyed are 7th graders?
35% = 85 seventh graders/ 245 students

8. Write 2 new statements you could make comparing students based on the survey data.
Any 2 statements other than the statements above using a difference, percent, scaling, fraction, or a ratio.

9. 12 packs of soda usually sell for $3.49. the cases are on sale for $2.99.
   a. What percent saving is this? 14% = $3.49-$2.99= $0.50 savings $0.50/$3.49 = 14%
   b. What would the price of a 12 pack need to be for a buyer to receive a 30% discount? $2.44 = $3.49x30% = $1.05 savings, $3.49-$1.05 savings = $2.44