

3. Matt is a well-known tennis player and has been approached by the manufacturers of Power Up energy drinks to endorse their beverage. They claim their drink will increase accuracy. Matt is very conscientious and doesn't want to endorse something that doesn't work. He finds that a local university did a study on energy drinks where they had participants play a computer game where they pushed a button when they saw a certain target. Then they all had a different energy drink and played the computer game again. The 25 participants who drank Power Up had a total increase in hits of 80. The 475 participants who drank other drinks had a total increase of 900 hits. Do you think Matt would be justified in saying that Power Up works better than other drinks? Why or why not?
4. A Seattle newspaper has collected data on the percentage of elementary school children in local elementary schools who meet the standards on the reading test. They paired this data with the percent of students in each school whose families were poor enough to qualify for free or reduced-price lunches. Use the table to make a scatter plot of the data and decide whether you think there is an association between these two variables. Which school(s) do you think are doing the best job? Explain your reasoning.

Elementary School	Percentage Meeting Reading Standard	Percentage Free/Reduced Lunch
Cascade View	63%	17%
Cathcart	52%	14%
Central	47%	33%
Dutch Hill	63%	14%
Machias	49%	23%
Riverview	52%	20%
Seattle Hill	75%	9%
Totem Falls	68%	4%

*Seattle Times Guide to Schools, 1997*

Review:

5. **Stretch Your Quadratic Function Muscle:** In parts a through e you are given one representation of a quadratic function: a table, a graph, or an equation. For each problem give two other representations.

a.  $y = 2(x - 3)^2 - 8$

b.

$x$	$y$
-6	6
-5	1
-3	-3
-2	-2

THIS HOMEWORK IS CONTINUED ON BACK OR ON THE NEXT PAGE.