Cancel Zeros, Drop Some of the Zeros, Divide, Then "Put Them Back On."

Mental Math Strategy

***When** to use this strategy:* Use this strategy when dividing and the front end numbers are compatible.
***How** to use this strategy:* Cancel zeros; Ignore any trailing zeros; Divide using front-end; Put the zeros you ignored back on.

Examples: $\frac{4800}{20} = \frac{480\cancel{0}}{2\cancel{0}} = \frac{48}{2} + \text{"0"} = 240$ $\quad 28000 \div 70 = 400$ $\quad \frac{210}{7000} = \frac{3}{100}$

Use this (new) strategy on the following:	
1.) If $n(x) = \frac{x}{200}$, find $n(46{,}000)$.	2.) n = number of students, p = profit ($), p = 70n – 400. If the profit is to be $300, find the number of students.
3.) Does the point (80, 6) lie on the graph of the function $g(t) = \frac{480}{t}$?	4.) Computer systems were $2,000 each. $26,000 is budgeted for computer systems. How many computer systems can be purchased?

Use any strategy you know on the following:	
5.) Solve $\frac{p}{68} = \frac{46}{92}$	6.) In a checking account the beginning balance was $800. The ending balance was $749. How much was removed from the account?
7.) Bill's batting average this year is .035 higher than last year's average of .375. What is Bill's batting average this year?	8.) At the baseball game the concession stands brought in a total of $75,000. There were 25 thousand people in attendance. What is the average amount spent by each person at the game?