

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

Mental Math Strategy

When to use this strategy: Use this technique when the divisor ends in one or more zeros.

How to use this strategy: First divide by the power of ten in the numerator and denominator (cancel the same number of zeros on the top and bottom). Ignore some (or all) of the remaining zeros (but remember where they were). Divide. Put the zeros back on.

Examples: $\frac{6800}{20} = \frac{68\cancel{00}}{2\cancel{0}} = \frac{68}{2}$ and '0' = 340 $\frac{60}{2000} = \frac{6}{200} = \frac{3}{100}$
 $\frac{500}{30,000} = \frac{5\cancel{00}}{30,0\cancel{00}} = \frac{5}{30}$ 'and 0 on bottom' = $\frac{1}{60}$

Use this (new) strategy on the following:	
1.) Solve: $60x = 4800$	2.) As a fund-raiser, the 8 th graders will sell 320 candy bars. If there are 80 students, what is the average number sold per student?
3.) Solve for b $100,000 \times b = 2,000,000$	4.) The area of the state of Arizona is $114,000 \text{ mi}^2$. The area of the Grand Canyon is 1900 mi^2 . How many times could the Grand Canyon fit into the state of Arizona?

Use any strategy you know on the following:	
5.) Simplify $-4236 + (-52)$	6.) Over one day, Jake the panda ate 36 lbs. of food. If he eats at a constant rate, how many pounds had he consumed halfway through the day?
7.) Estimate the total bill for the following items: \$4.32, \$7.41, \$6.23.	8.) If 6,600 gallons of water are used in a (30-day) month, what is the average water usage, per day?