

Break Apart

Mental Math Strategy

When to use this strategy: Use this strategy when adding, subtracting, or multiplying numbers that can be broken apart to make the calculations easy.

How to use this strategy: This strategy works real well when multiplying a 1-digit number times a 2-digit number. Break the 2-digit number apart (e.g., $13 = 10 + 3$) and use the distributive property. For addition and subtraction break the numbers into convenient chunks, and generally use front end (left to right).

Examples: $8 \times 13 = 8(10 + 3) = 8(10) + 8(3) = 80 + 24 = 104$

$483 - 61 = (480 - 60) + (3 - 1) = 420 + 2 = 422$ $12,680 + 105$: “126+1” + “80+5” = “127” + “85”: 12,785

Use this (new) strategy on the following:	
1.) If last year's budget was \$745,000 and it will be increased by \$12,000, what is the new budget?	2.) b = number of bookshelves manufactured, T = total cost (\$) of manufacturing for one week, $T = 18b + 500$ Find the cost to manufacture 5 bookshelves.
3.) The point (14, ____) is on the line $y = -5x$. Fill in the blank.	4.) Theodore has a bank account with \$326. He spends \$90 on a new bike. How much money is left in the account?

Use any strategy you know on the following:	
5.) Evaluate $2ab$ where $a = 11$ and $b = 45$.	6.) The cost of gas has quadrupled since the 1980's. If the cost of an average fill up in 1982 was \$9.12, how much does it cost now?
7.) Evaluate $\frac{1}{9}(72)$	8.) If they buy 7 T-shirts for the club and they each cost \$13, what is the total cost?