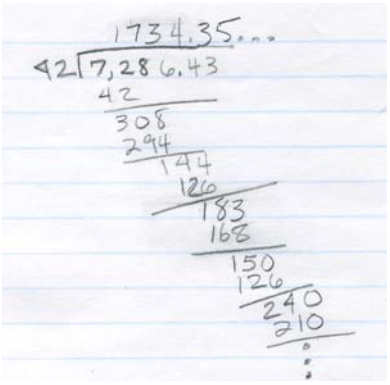
Visual Strategies in Algebra

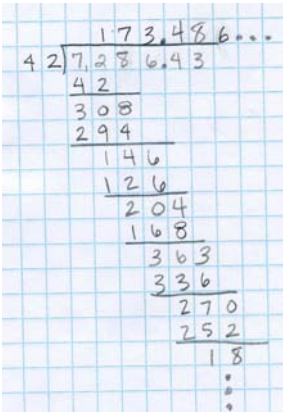
Some of the best ways to facilitate learning algebra involve organizing your work visually. Although some visual learners are artistic, being visual may not mean being organized! Here's some simple ways to help:

If your math work looks like this:



(can you find the errors?)

Try using simple graph paper, like this:



"Side work" is probably one of the best visual organizers. Keep the right 1/3 of your paper for calculations and notes, keeping the progress of your work on the left. This is also important when doing word problems.

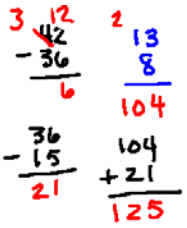
$(42-36)^2 - 2(15) + 8(13)$

$(6)^2 - 2(15) + 8(13)$

$36 - 15 + 104$

$21 + 104$

125



Having to solve multiple equations, like in early graphing, is a time when organization is important. Visual organizing means thinking about the best placements for the solving process, the *xy* chart, and the graph. Here's one possible layout:

$3x + 2y = 12$

$x = 0 \quad 3(0) + 2y = 12$

$2y = 12$

$\frac{2y}{2} = \frac{12}{2}$

$y = 6$

$y = 0 \quad 3x + 2(0) = 12$

$3x = 12$

$\frac{3x}{3} = \frac{12}{3}$

$x = 4$

$x = 2 \quad 3(2) + 2y = 12$

$6 + 2y = 12$

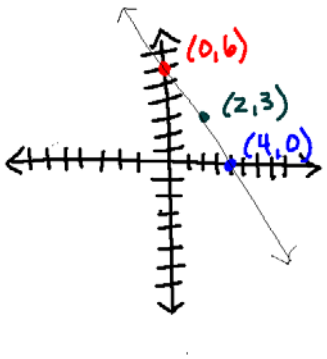
$-6 \quad -6$

$2y = 6$

$\frac{2y}{2} = \frac{6}{2}$

$y = 3$

x	y	
0	6	→ (0,6)
4	0	→ (4,0)
2	3	→ (2,3)



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