Solving for a Variable

This sheet focuses on solving for "y" when an equation is given in Ax + By = C form. This concept is necessary to master in Algebra so that lines and linear equations can be simplified and solved. Don't forget to simplify any fractions you come across and remember to use ***inverse*** operations to undo!

Solve for "y".

1) $3x + y = 12$

2) $2x + y = 41$

3) $x + y = 4$

4) $3x - y = 16$

5) $-5x - y = 12$

6) $6x + 2y = 12$

7) $3x + 4y = 8$

8) $5x + 2y = 9$

9) $-6x + 9y = 11$

10) $3x - 5y = 12$

11) $8x - 3y = 17$

12) $-7x - 2y = 18$

13) $-5x - 9y = 23$

14) $x + 4y = -31$

15) $x - 3y = 17$

Answers: 1) $y = 12 - 3x$ 2) $y = 41 - 2x$ 3) $y = 4 - x$ 4) $y = -16 + 3x$ 5) $y = -12 - 5x$

6) $y = 3 - 6x$ 7) $y = 2 - \frac{3}{4}x$ 8) $y = \frac{9}{2} - \frac{5}{2}x$ 9) $y = \frac{11}{9} + \frac{2}{3}x$ 10) $y = -\frac{12}{5} + \frac{3}{5}x$

11) $y = -\frac{17}{3} + \frac{8}{3}x$ 12) $y = -9 - \frac{7}{2}x$ 13) $y = -\frac{23}{9} - \frac{5}{9}x$ 14) $y = -\frac{31}{4} - \frac{1}{4}x$ 15) $y = -\frac{17}{3} + \frac{1}{3}x$