

Solve:  $5x + 2y = 19$   
 $3x + 3y = 15$

Same Signs Subtract and  
 Different Signs Add

Make the second variable the same

$$\begin{array}{r} \textcircled{1} \quad 5x + 2y = 19 \quad \times 3 \\ \textcircled{2} \quad 3x + 3y = 15 \quad \times 2 \end{array}$$

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$$\begin{array}{r} \textcircled{3} \quad 15x + 6y = 57 \\ \textcircled{4} \quad 6x + 6y = 30 \end{array}$$

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$$\begin{array}{r} \textcircled{3} - \textcircled{4} \quad 9x \quad = 27 \\ \quad \quad \quad \div 9 \quad \quad \div 9 \\ \quad \quad \quad x \quad = 3 \end{array}$$

Sub  $x = 3$  into equation  $\textcircled{2}$

$$3x + 3y = 15$$

$$9 + 3y = 15$$

Solve to find  $y$

$$3y = 6$$

$$y = 2$$

$x = 3, y = 2$



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