

MGF /

Solving a system of linear equations using substitution

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Use substitution to solve the system.

$$-5x + 3y = -17$$

$$-3y = 1$$

$$+3y + 2y$$

$$x = \square$$

$$y = \square$$



$$x = 3y + 1$$

$$-5x + 3y = -17$$

$$-5(3y + 1) + 3y = -17$$

$$-15y - 5 + 3y = -17$$

$$-12y - 5 = -17$$

$$-12y = -12$$

$$y = 1$$

Plug in

Answer

$$x = 3(1) + 1$$

$$x = 3 + 1$$

$$x = 4$$

$$(4, 1)$$

Note: The Canvas feature is not available in this version.

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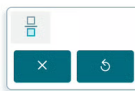
$$5x + 3y = 13$$

$$-2x + y = -3$$

$$+2x$$

$$x = \square$$

$$y = \square$$



$$y = 2x - 3$$

$$5x + 3y = 13$$

$$5x + 3(2x - 3) = 13$$

$$5x + 6x - 9 = 13$$

$$11x - 9 = 13$$

$$11x = 22$$

$$x = 2$$

Plug it in

$$y = 2x - 3$$

$$y = 2(2) - 3$$

$$y = 4 - 3$$

$$y = 1$$

$$(2, 1)$$