

Melani Situmorang

Professor In Hak Moon

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Decide whether the ordered pair is a solution of the given system

#5. $x + y = 6$

$x - y = 4$ (5,1)

Answer:

(5) $(x + y = 6)$

(1) $(x - y = 4)$

(5) $(x) + 5 (y) = (5) \cdot (6)$

(1) $(x) - (1) \cdot (-y) = (1) \cdot (4)$

$5x + 5y = 30$

$x + y = 4$

$= 6x + 6y = 34$

$6x + 6y = 34$

$6y = \frac{34}{6x}$

$y = \frac{34}{6x-6}$

$$y = \frac{17}{6x-3}$$

I guess the ordered pair is not a solution of the given system.

$$2. x - y = 17$$

$$x + y = -1$$

$$(8).(x) - (8).(y) = (17).(8)$$

$$(-9)(x) - (-9).(y) = (-1).(-9)$$

$$8x - 8y = 136$$

$$-9x + (-9y) = 9$$

$$= -x - y = 145$$

$$y = \frac{145}{x+1}x \frac{x+1}{x+1}$$

$$y = 145x + 1$$

I guess the ordered pair is not a solution of the given system.

$$7. 2x + y = 8$$

$$3x + 2y = 20 \quad (8, -9)$$

Answer:

$$(8) (2x) - (8).(y) = (8).(8)$$

$$(-9)(3x) + (-9).(2y) = (20).(9)$$

$$16x - 8y = 64$$

$$-27x + -16y = -180$$

$$= -11x - 8y = 116$$

$$-11x - 24y = 116$$

$$y = 116 / 11x + 24$$