Performance Task – Standard Form Ax + By + C = 0 Thinking Questions

Solutions

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a) $y = -2x + 7$

$y + 2x - 7 = -2x + 7 + 2x - 7$

$2x + y - 7 = 0$

$A = 2, B = 1, C = -7$

b) $y = x - 3$

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

$-x + y + 3 = 0$

$\dfrac{-x + y + 3}{-1} = \dfrac{0}{-1}$

$\dfrac{-1x}{-1} + \dfrac{y}{-1} + \dfrac{3}{-1} = 0$

$x - y - 3 = 0$

$A = 1, B = -1, C = -3$

c)

$y = \dfrac{3}{4}x - 2$

$4 \times y = 4 \times \left(\dfrac{3}{4}x - 2 \right)$

$4y = 4 \times \dfrac{3}{4}x - 4 \times 2$

$4y = 3x - 8$

$4y - 3x + 8 = 3x - 8 - 3x + 8$

$-3x + 4y + 8 = 0$

$\dfrac{-3x + 4y + 8}{-1} = \dfrac{0}{-1}$

$\dfrac{-3x}{-1} + \dfrac{4y}{-1} + \dfrac{8}{-1} = 0$

$3x - 4y - 8 = 0$

$A = 3, B = -4, C = -8$