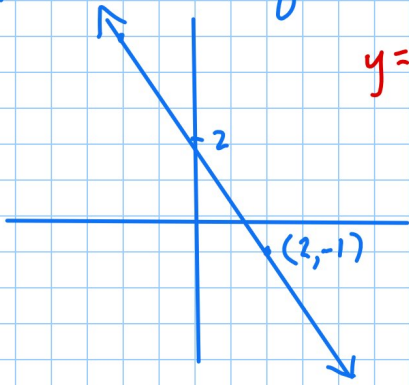


WARMUP

1) Write the equation of the line in slope-intercept form:



2) Factor out the GCF

$$7x^2 - 35x + 21$$

$$7(x^2 - 5x + 3)$$

3) Given $f(x) = x^2 - 5$

find:

a) $f(-3) = 4$

b) $f(2) = -1$

c) $f(2+h)$

$$(2+h)^2 - 5$$

$$4 + 4h + h^2 - 5$$

$$h^2 + 4h - 1$$

3/p 8

$$1000 \text{ ft}^3 \rightarrow \$90 \quad (1000, 90)$$

$$1600 \text{ ft}^3 \rightarrow \$105 \quad (1600, 105)$$

$$\begin{aligned} \text{a) } m &= \frac{105 - 90}{1600 - 1000} = \frac{15}{600} \\ &= \frac{\$.025}{\text{ft}^3} \end{aligned}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

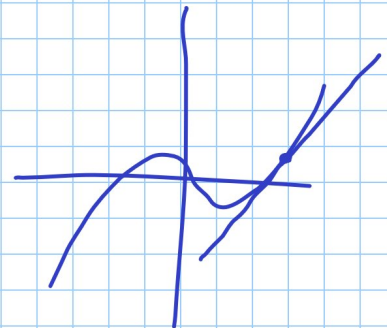
b) $y = \text{cost}$
 $x = \text{cubic feet}$

$$y = mx + b$$

$$y = .025x + b$$

$$90 = .025 \cdot 1000 + b$$

$$90 = 25 + b$$



$$65 = b$$

$$y = .025x + 65$$

$$c) y = \$130$$

$$130 = .025x + 65$$

$$65 = .025x$$

$$x = 2600 \text{ ft}^3$$

Factor out GCF

$$\underline{\text{ex:}} \quad 8a^2b + 12ab^2$$

$$4ab(2a + 3b)$$

$$7A^5B^4 + 14A^6B^3$$

$$7A^5B^3(B + 2A)$$

$$\underline{\text{ex:}} \quad 7(x+3)^5(x-5)^4 + 14(x+3)^6(x-5)^3$$

$$7(x+3)^5(x-5)^3 \left[\begin{array}{c} (x-5) + 2(x+3) \\ x-5 + 2x+6 \end{array} \right]$$

$$7(x+3)^5(x-5)^3(3x+1)$$

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Then factor out the GCF

$$1) 7x^2 - 14x + 28$$

$$2) 3x^2y - 12xy^3$$

$$3) 5a^2b^2c^2 + 10abc^2$$

$$4) 18(x+3)^3(x-5)^8 + 24(x+3)^4(x-5)^7$$