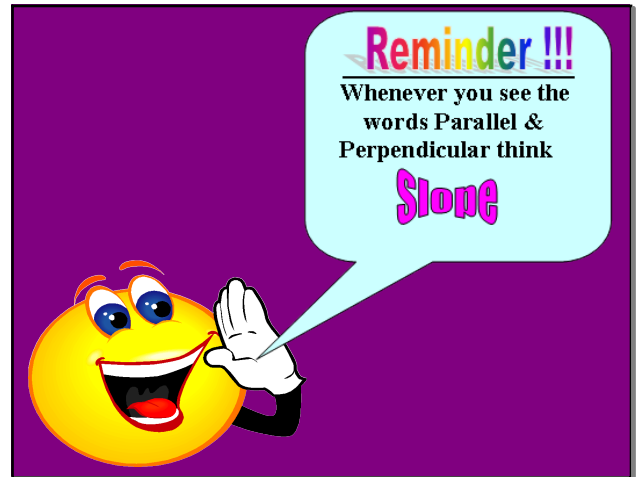


Nov 8-11:06 AM




Nov 9-11:19 AM



Nov 8-11:17 AM

Warm Up Questions

- #1 Find the equation of a line parallel to $3y=4x-1$ and passing through the point $(4,2)$.
- #2 Determine the equation of a line perpendicular to $4x+5y=7$ and having an x -intercept of -2 .
- #3 Determine the equation of a horizontal line with a y -intercept of -3



Dec 7-1:49 PM

Find the equation of a line parallel to $3y=4x-1$ and passing through the point $(4,2)$.

Step #1

Parallel - (Same Slope)

$$3y = 4x - 1$$

$$y = \frac{4x - 1}{3}$$

$$m = 4/3$$

Step #2

Write Equation in General Form

$$y - y_1 = m(x - x_1)$$

$$y - 2 = 4/3(x - 4)$$

$$3y - 6 = 4(x - 4)$$

$$3y - 6 = 4x - 16$$

$$-4x + 3y - 6 + 16 = 0$$

$$-4x + 3y + 10 = 0$$

$$4x - 3y - 10 = 0$$

Nov 6-8:25 AM

Determine the equation of a line perpendicular to $4x+5y=7$ and having an x -intercept of -2 .

Step #1

Opposite Reciprocal Slope

$$4x + 5y = 7$$

$$5y = -4x + 7$$

$$y = \frac{-4x + 7}{5}$$

$$m = 5/4$$

Step #2

Point x -int ($y = 0$)

Point $(-2, 0)$

Step #3

Write Equation in General Form

$$y - y_1 = m(x - x_1)$$

$$y - 0 = 5/4(x - (-2))$$

$$y - 0 = 5/4(x + 2)$$

$$4y = 5(x + 2)$$

$$4y = 5x + 10$$

$$-5x + 4y - 10 = 0$$

$$5x - 4y + 10 = 0$$

Nov 6-8:26 AM

Determine the equation of a horizontal line with a y-intercept of -3.

Step #1

Horizontal Line

Slope = 0/1 or 0

Step #2

Point y-int = -3

(0, -3)

Step #3

Write Equation in General Form

$$\begin{aligned}y &= mx + b \\y &= 0x - 3 \\y &= -3 \\y + 3 &= 0\end{aligned}$$

Nov 6-8:26 AM