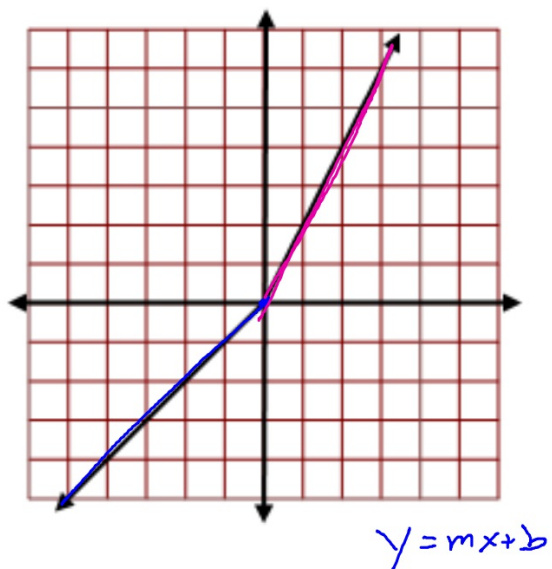


Write the equation of the piecewise function

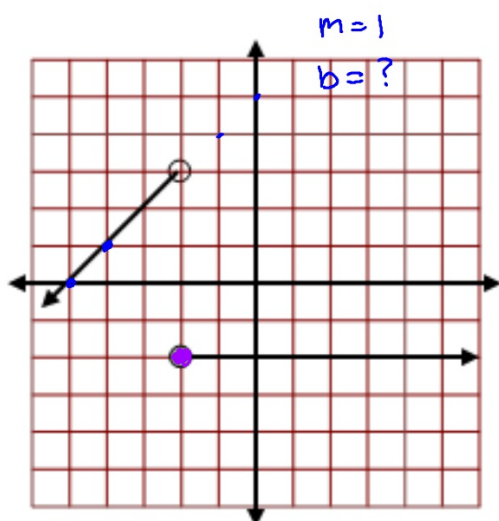


$$x < 0 \\ y = x$$

$$x \geq 0 \\ y = 2x$$

$$f(x) = \begin{cases} x & x < 0 \\ 2x & x \geq 0 \end{cases}$$

Write the equation of the piecewise function



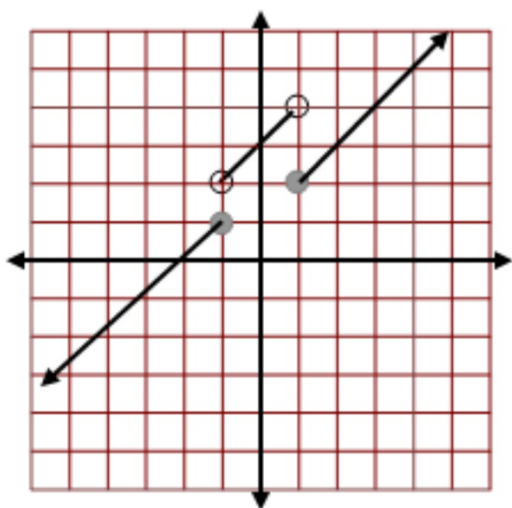
$$\begin{aligned}(-5, 0) \quad y &= mx + b \\ y &= 1x + b \\ 0 &= 1(-5) + b \\ 0 &= -5 + b \\ b &= 5\end{aligned}$$

$$\begin{aligned}x < -2 \\ y &= x + 5\end{aligned}$$

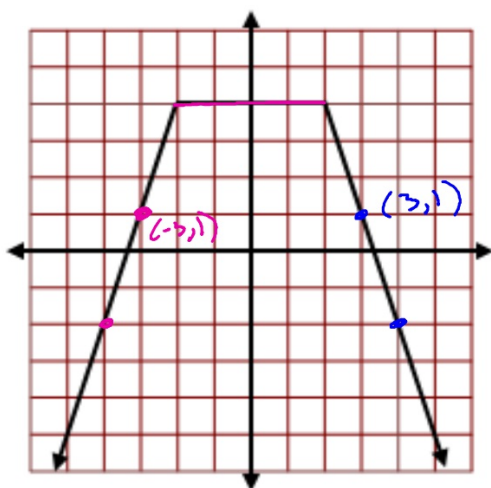
$$\begin{aligned}x \geq -2 \\ y &= -2\end{aligned}$$

$$f(x) = \begin{cases} x + 5 & x < -2 \\ -2 & x \geq -2 \end{cases}$$

Write the equation of the piecewise function



Write the equation of the piecewise function



$$\begin{aligned}
 x &\leq -2 \\
 m &= 3 \\
 y &= mx + b \\
 y &= 3x + b \\
 1 &= 3(-5) + b \\
 1 &= -15 + b \\
 16 &= b \\
 y &= 3x + 16
 \end{aligned}$$

$$\begin{aligned}
 -2 < x < 2 \\
 y &= 4
 \end{aligned}$$

$$\begin{aligned}
 x &\geq 2 \\
 m &= -3 \\
 y &= mx + b \\
 y &= -3x + b \\
 1 &= -3(3) + b \\
 1 &= -9 + b \\
 10 &= b \\
 y &= -3x + 10
 \end{aligned}$$

$$f(x) = \begin{cases} 3x + 16 & x \leq -2 \\ 4 & -2 < x < 2 \\ -3x + 10 & x \geq 2 \end{cases}$$