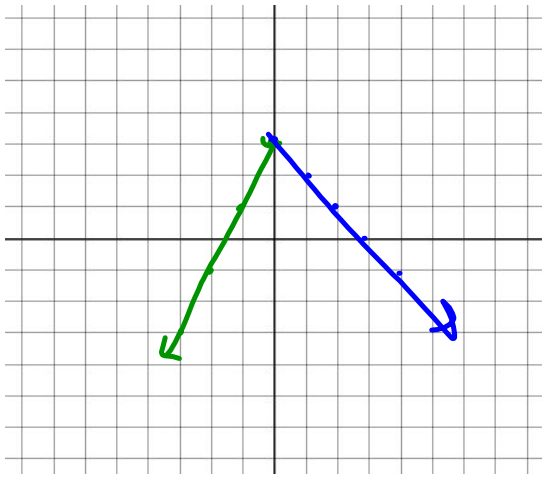


$2x+3 \quad x<0$

$-x+3 \quad x \geq 0$

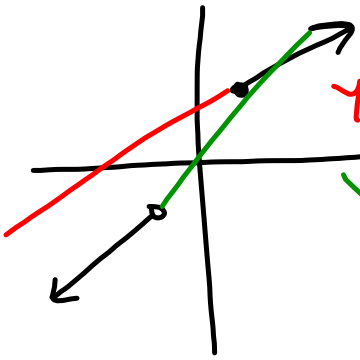
$f(2) = -(2)+3$

1

3) $f(x) = \begin{cases} 3x+5 & x \leq -2 \\ x-4 & x > 2 \end{cases}$

$Y_1 = (3x+5)(x \leq -2) + (x-4)(x>2)$

2nd Math

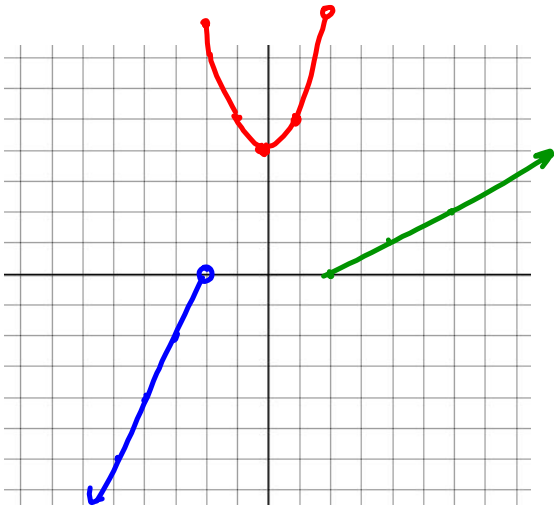


$y = \frac{1}{2}x + \frac{3}{2}$, $x \geq 1$

$y = x$, $x < -1$

More Piecewise

$$f(x)=\begin{cases} 2x+4 & x<-2 \\ x^2+4 & -2\le x<2 \\ \frac{1}{2}x-1 & x\ge 2 \end{cases}$$



$y=x^2+4$

vertex $(\frac{-b}{2a}, f(x))$ = y-int $(0,4)$

$a=1 \quad b=0 \quad c=4$

b/c b term is missing

Need more values

$f(1)=1^2+4$

$=5$

$f(2)=2^2+4$

$=8$

In TI-84 calc

$-2\le x<2$

$Y_1=(2x+4)(x<-2)+(x^2+4)(x\ge -2 \text{ and } x<2)$

$+(0.5x-1)(x\ge 2)$