

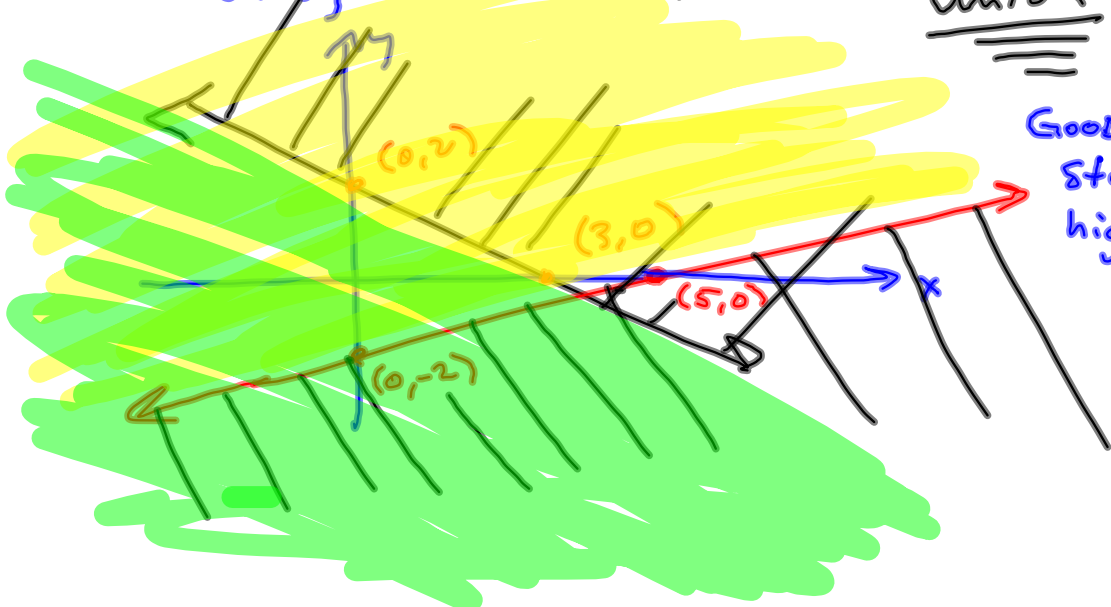
#46 on 3.7 do as intersection

$2x + 3y \leq 6$ $(0, 2), (3, 0)$

$2x - 5y \leq 10$ $(0, -2), (5, 0)$

Union

Good stuff highlighted



Website has

Homework Solutions -
Lecture Notes
Old Tests (Solutions)
Homework Assignments
Discussion


A hard Piecewise Function

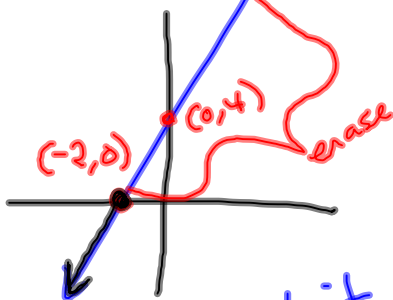
$$f(x) = \begin{cases} 2x+4 & \text{if } x \leq -2 \\ 1 & \text{if } x = -1 \\ -\frac{4}{5}x + 2 & \text{if } x > 2 \end{cases}$$

$y = 2x + 4$, $x \leq -2$
 $m = 2 = \frac{2}{1} = \frac{\text{up 2}}{\text{right 1}}$
 $(0, b) = (0, 4)$

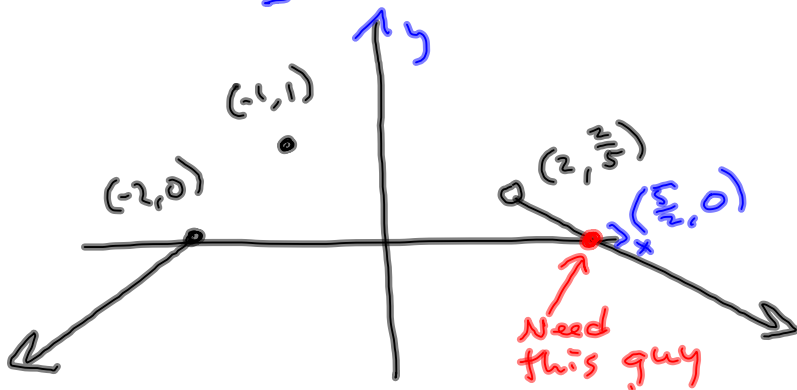
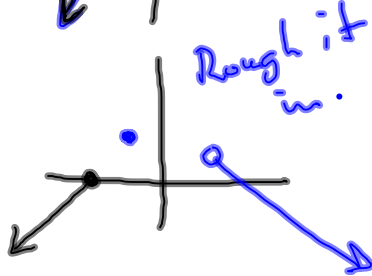
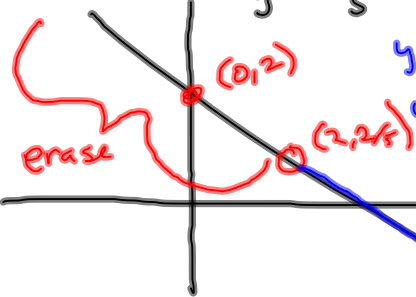
$y = 2x + 4$
 $y = 2(-2) + 4$
 $y = 0 \rightsquigarrow (-2, 0) \bullet \leq$

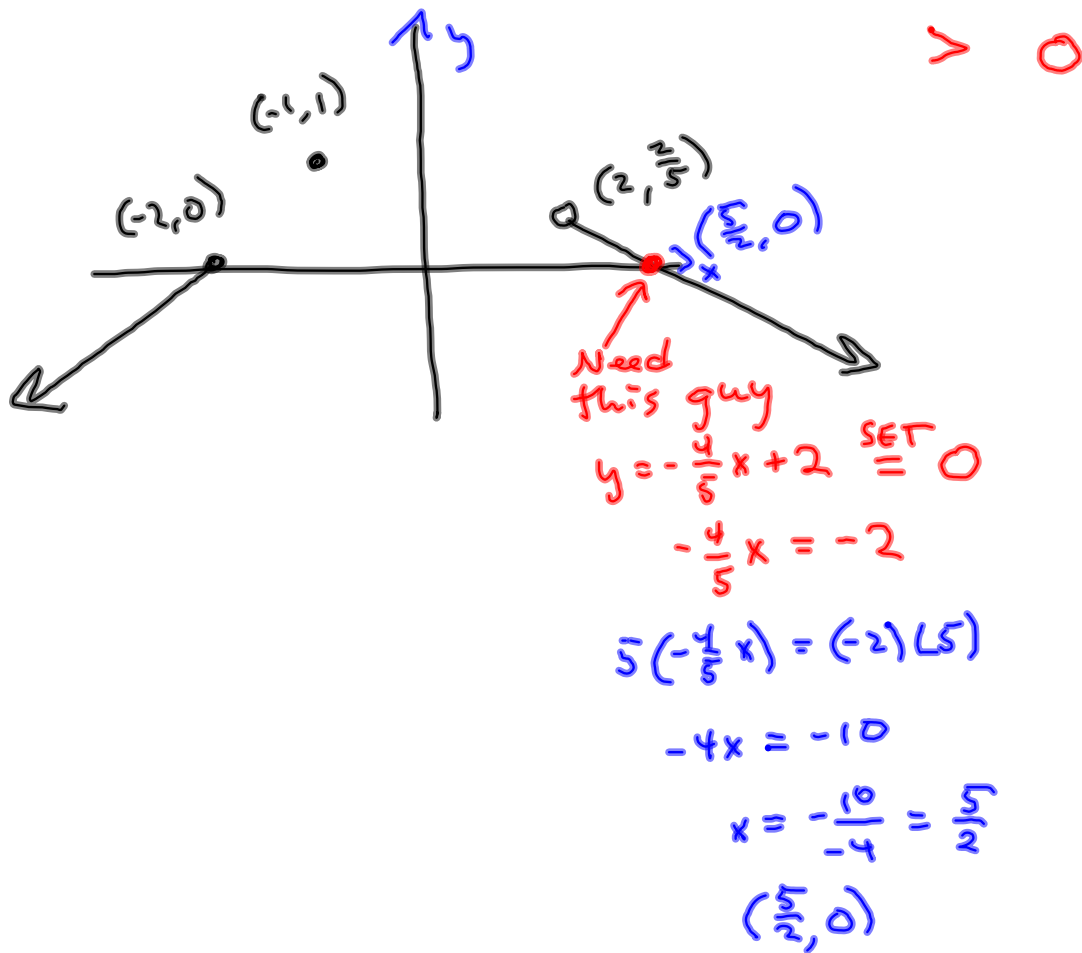
$(-1, 1)$ | $y = 1$ if $x = -1$ Lindsey G.

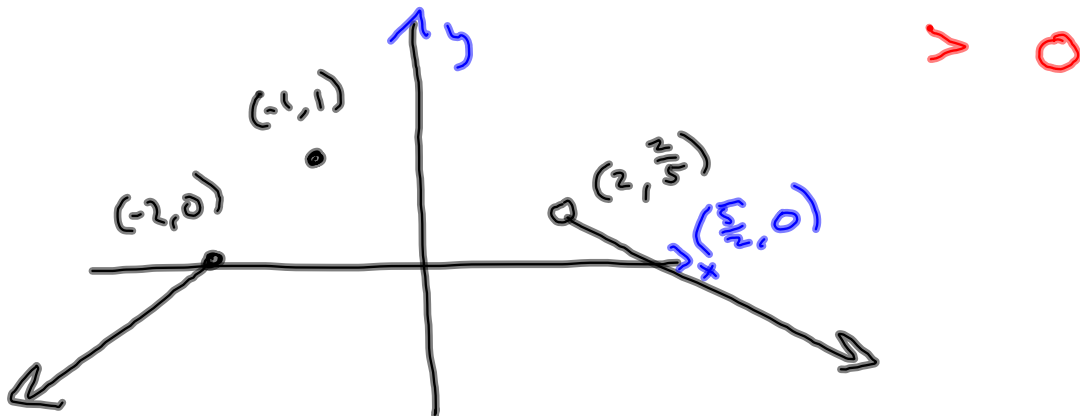




$y = -\frac{4}{5}x + 2$ if $x > 2$
 $y = -\frac{4}{5}x + 2$
 $y = -\frac{4}{5}(2) + 2 = \frac{2}{5}$
 $= -\frac{8}{5} + \frac{10}{5}$
 $= \frac{2}{5}$
 $\rightsquigarrow (2, \frac{2}{5})$
 $>$ Open dot.





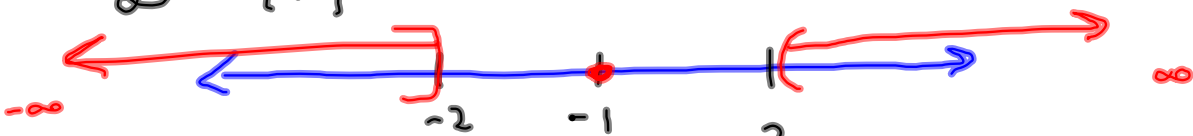


$$f(x) = \begin{cases} 2x+4 & x \leq -2 \\ 1 & x = -1 \\ -\frac{4}{5}x+2 & x > 2 \end{cases}$$

Domain?

$$\mathcal{D} = \{x \mid x \leq -2 \text{ or } x = -1 \text{ or } x > 2\}$$

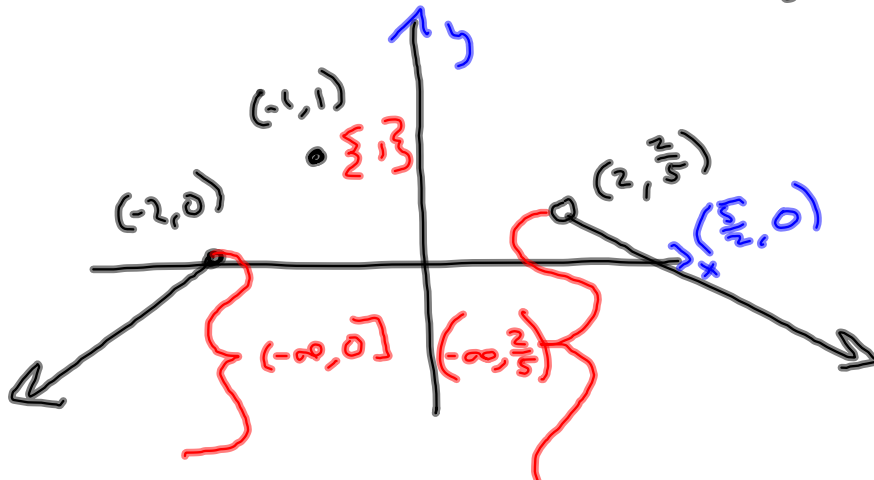
Set-builder



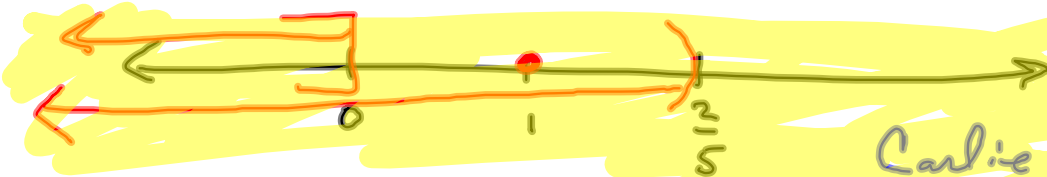
$$\mathcal{D} = (-\infty, -2] \cup \{-1\} \cup (2, \infty)$$

Interval Notation

Range

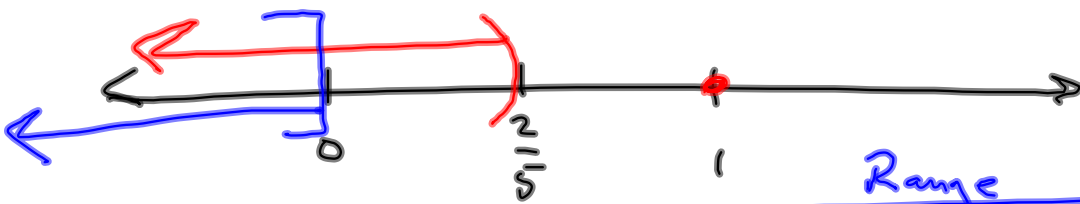


$$(-\infty, 0] \cup \{1\} \cup (-\infty, \frac{2}{5}) = (-\infty, \frac{2}{5})$$



Carlisle sees
her in structure's
an idiot.

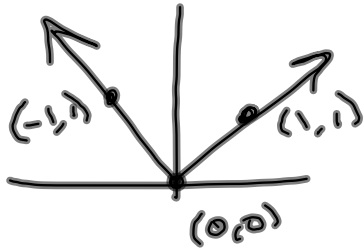
$\frac{2}{5} < 1$ Dub!



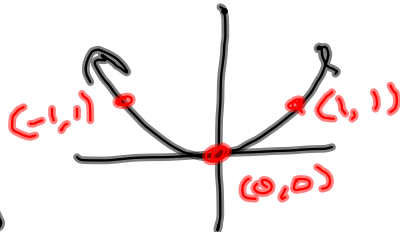
Range

$$(-\infty, 0] \cup \{1\} \cup (-\infty, \frac{2}{5}) = (-\infty, \frac{2}{5}) \cup \{1\}$$

$$f(x) = |x|$$



$$f(x) = x^2$$

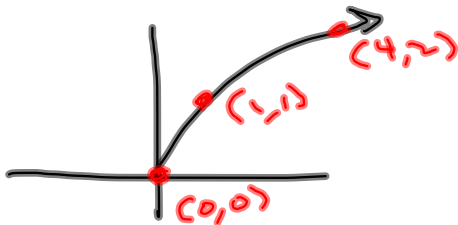


- $f(x+k)$
- $f(x-k)$
- $f(x)+k$
- $f(x)-k$

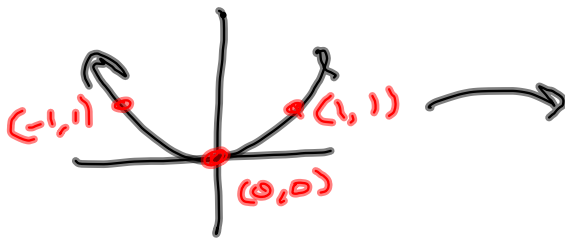
$$g(x) = (x-3)^2 + 7$$

$$f(x) = x^2$$

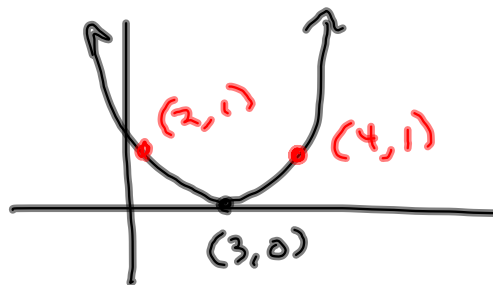
$$f(x) = \sqrt{x}$$



$$f(x) = x^2$$



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



$$y = (x-3)^2 + 7 = f(x-3) + 7$$

