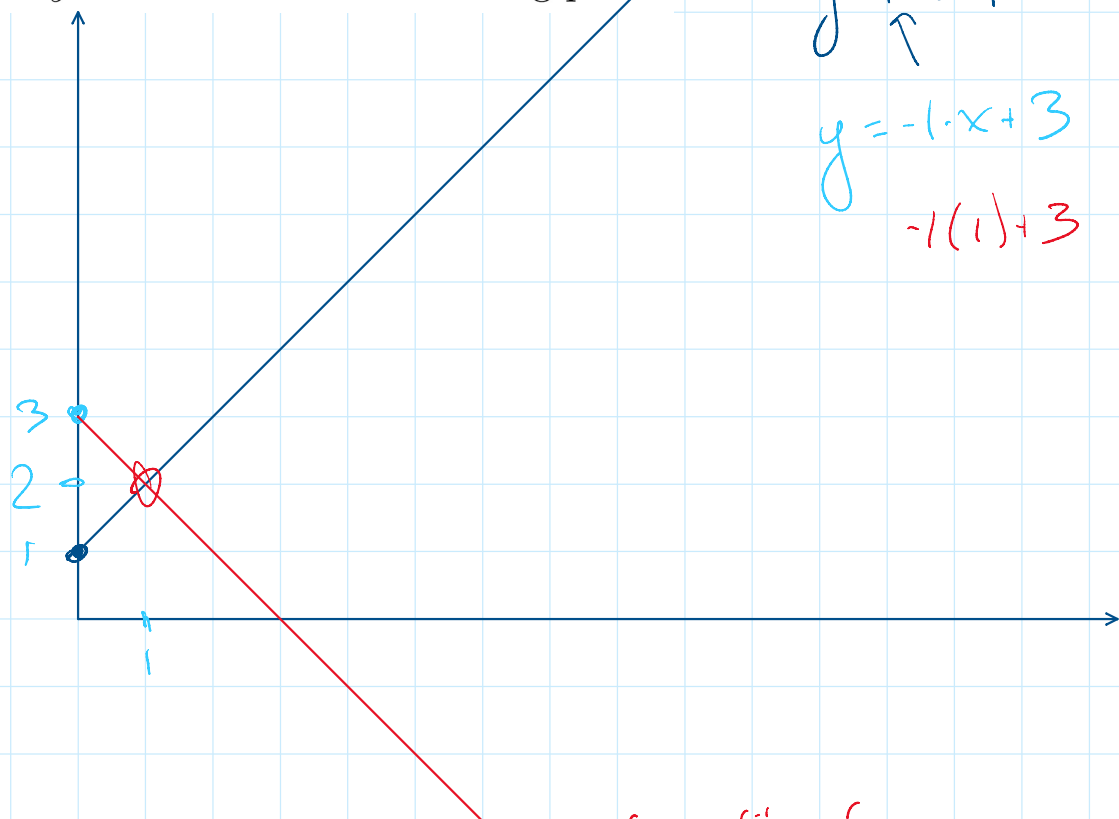


10. Where does the line $y = 1 + x$ cross the line $y = 3 - x$? Find both the x and y coordinates of the crossing point.



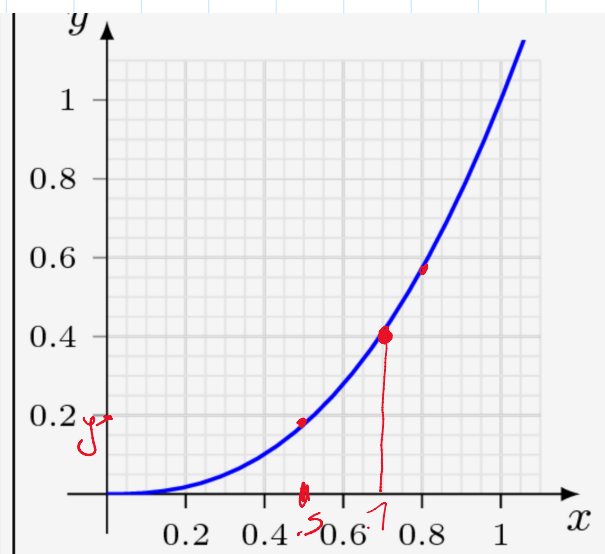
$$y = 1 \cdot x + 1$$

$$y = -1 \cdot x + 3$$

$$1(1) + 1$$

$$-1(1) + 3$$

$$.5 \xrightarrow{f} .19 \xrightarrow{f^{-1}} .5 \xrightarrow{f} .19$$



E) The idea is that the number .5 is bouncing back and forth through f and f^{-1} . .5 goes through f to something approximating .19, then back to .5, and then through f again to .19.

$$f(.5) = .19$$

$$f^{-1}(.19) = .5$$

$$f(f^{-1}(f(.5)))$$

$$D) f(1 + .7) = .57$$

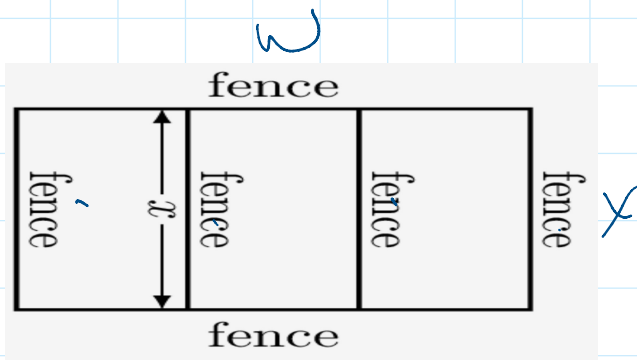
Use the graph above (and **not** the graph in the textbook) to find

- (a) $f^{-1}(0.4)$
- (b) $f(0.4)$
- (c) $f(0.1 + f^{-1}(0.4))$
- (d) $f(f^{-1}(0.4))$
- (e) $f(f^{-1}(f(0.5)))$

(c) $f(0.1 + f^{-1}(0.4))$

(d) $f(f^{-1}(0.4))$

(e) $f(f^{-1}(f(0.5)))$



$$x \cdot w = 2000$$

$$w = \frac{2000}{x}$$

$$L = 2w + 4x$$

$$= 2 \frac{2000}{x} + 4x$$