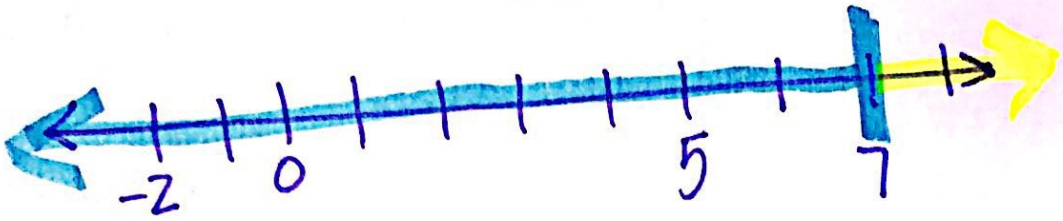
1.8: Evaluate Piecewise Functions

$$f(x) = \begin{cases} x+4, & x \leq 7 \\ 6x-8, & x > 7 \end{cases}$$

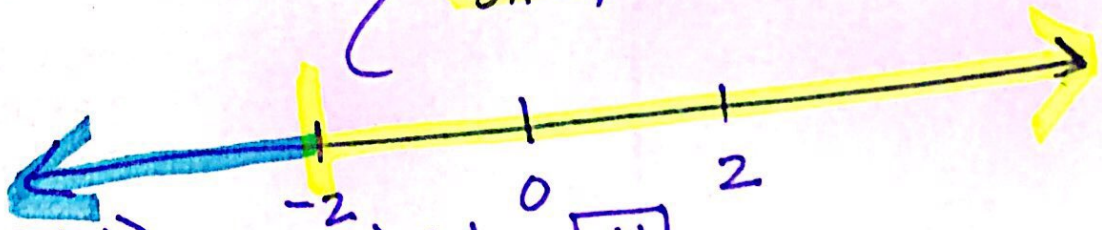


Ex 1) $f(3) = (3)+4 = \boxed{7}$

Ex 2) $f(10) = 6(10)-8 = \boxed{52}$

Ex 3) $f(7) = (7)+4 = \boxed{11}$

$$g(x) = \begin{cases} 3x^2, & x < -2 \\ 5x+1, & x \geq -2 \end{cases}$$



Ex 4) $g(-1) = 5(-1)+1 = \boxed{-4}$

Ex 5) $g(-6) = 3(-6)^2 = \boxed{108}$

Ex 6) $g(900) = 5(900)+1 = \boxed{4501}$

Ex 7) $g(-2) = 5(-2)+1 = \boxed{-9}$