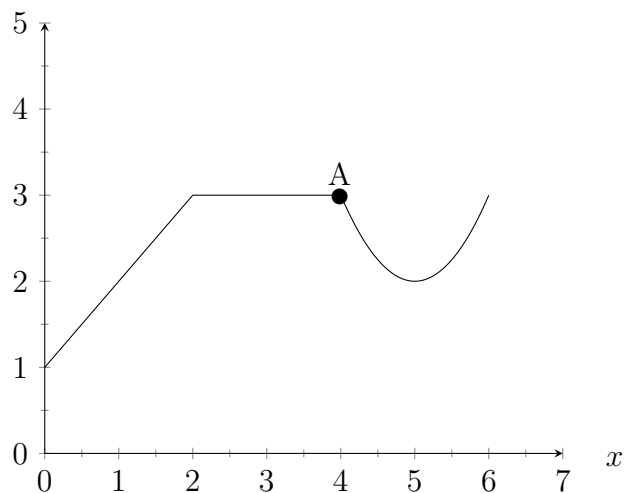
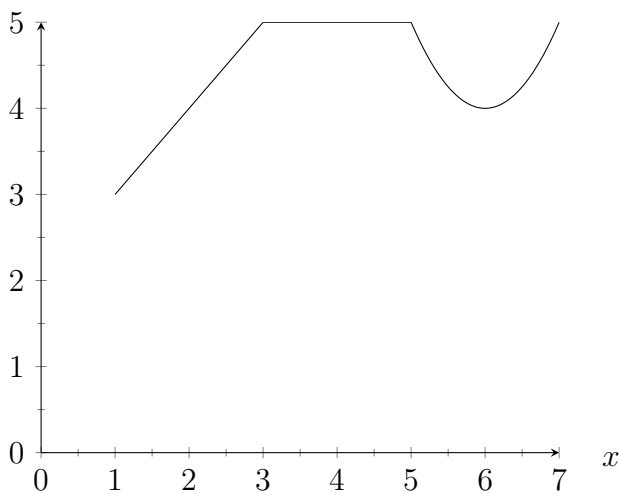


1. Suppose f is a function whose graph is the figure below:



- (a) What are the coordinates of the point A? $(4, 3)$
- (b) What is the domain of f ? $[0, 6]$
- (c) What is the range of f ? $[1, 3]$
- (d) Sketch the graph of $g(x) = f(x - 1) + 2$.



2. Let $f(x) = 4x + 5$. Find a formula for f^{-1} .

$$x = 4y + 5 \implies f^{-1}(x) = \frac{x - 5}{4}$$

BONUS: Find a formula for the function f in Problem 1.

$$f(x) = \begin{cases} x + 1 & 0 \leq x \leq 2 \\ 3 & 2 \leq x \leq 4 \\ (x - 5)^2 + 2 & 4 \leq x \leq 6 \end{cases}$$