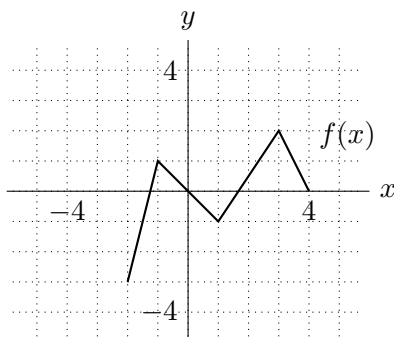
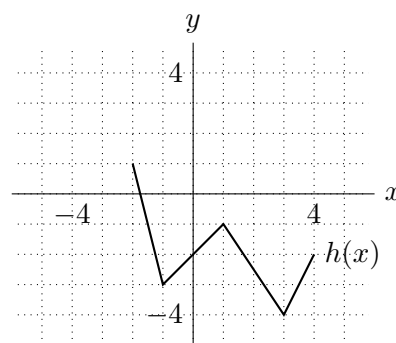
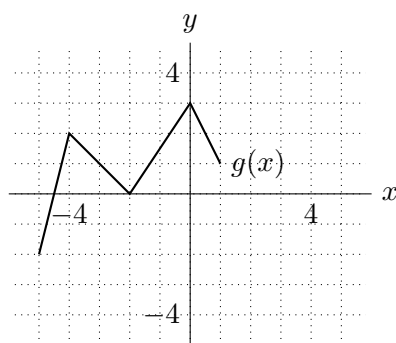


7. [15 points] The graph of a function $f(x)$ is shown below. The domain of $f(x)$ is $-2 \leq x \leq 4$.



You do not need to show work on this page.

a. [6 points] Each of the functions $g(x)$ and $h(x)$ shown below is a transformation of the function $f(x)$. Write a formula for each function in terms of $f(x)$.



$g(x) = \underline{f(x + 3) + 1}$ $h(x) = \underline{-f(x) - 2}$

b. [4 points] Determine the domain and range of the function $j(x) = -2f(x - 6) + 3$.

Domain: $\underline{4} \leq x \leq \underline{10}$ Range: $\underline{-1} \leq y \leq \underline{9}$

c. [5 points] On the axes below, draw a graph of the derivative of $f(x)$.

