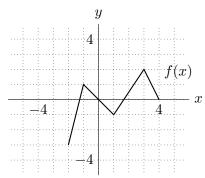
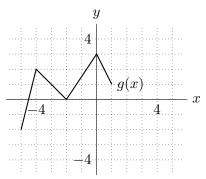
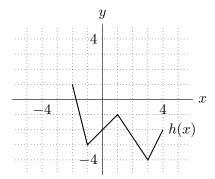
7. [15 points] The graph of a function f(x) is shown below. The domain of f(x) is  $-2 \le x \le 4$ .



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).





$$g(x) = \underline{\hspace{1cm}}$$

$$h(x) = \underline{\hspace{1cm}}$$

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

Domain:  $\leq x \leq$ 

Range:  $\leq y \leq$ 

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

