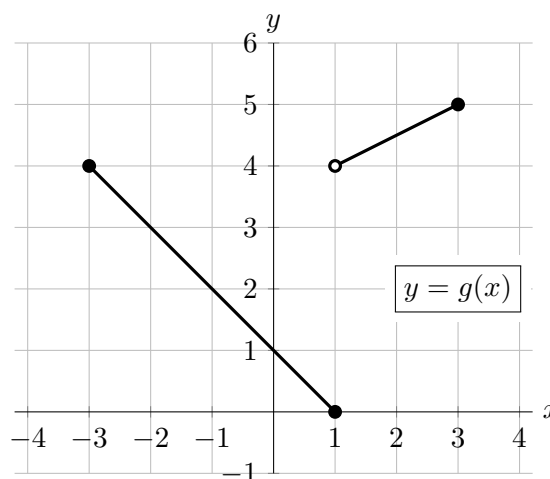
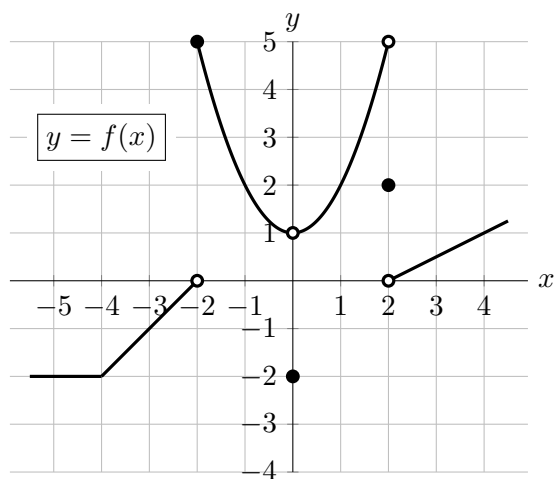


The graphs of the functions  $f(x)$  and  $g(x)$  are included here for your convenience.



- g. [3 points] Find all the values of  $x$  with  $-5 < x < 4$  at which the function  $f(x)$  is not continuous.

**Answer:** \_\_\_\_\_

- h. [2 points] What is the range of  $y = g(x)$ ?

**Answer:** \_\_\_\_\_

- i. [2 points] For which of the following values of  $x$  is  $f'(x) > 0$ ? Circle all that apply.

$x = -5$        $x = -1$        $x = 1.5$        $x = e$       NONE OF THESE

2. [5 points] Let

$$K(p) = (1 + \cos(p))^{1+2p}.$$

Use the limit definition of the derivative to write an explicit expression for  $K'(4)$ . *Your answer should not involve the letter  $K$ . Do not attempt to evaluate or simplify the limit. Please write your final answer in the answer box provided below.*

**Answer:**  $K'(4) =$