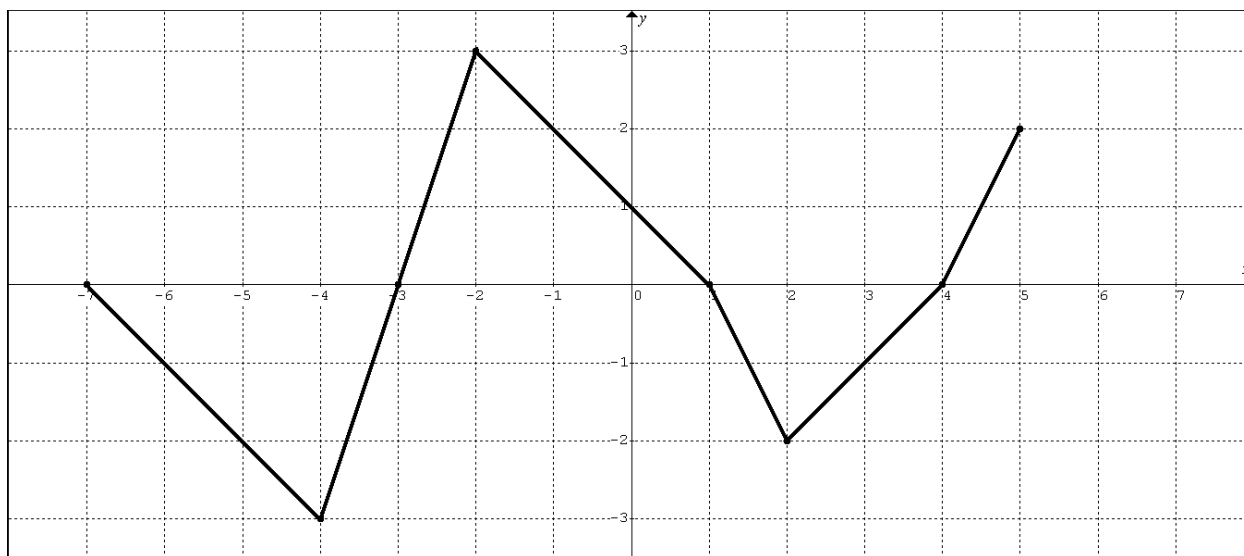


## AB: Q304 UNIT WARM UP



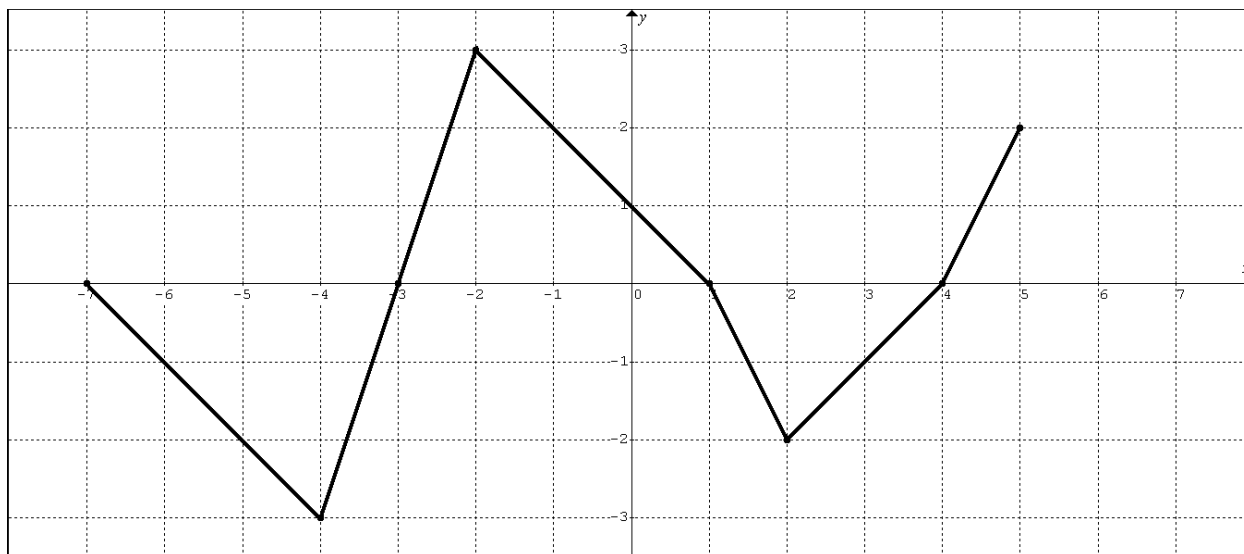
The graph above represents  $f'(x)$  (the derivative of the function  $f(x)$ ) on  $-7 \leq x \leq 5$ .

Suppose  $f(-3) = 80$ .

1. Evaluate  $\int_{-7}^5 f'(x) dx$

2. Find  $f(5)$  and  $f(-7)$

3. What is the average rate of change in  $f(x)$  on the interval  $-7 \leq x \leq 5$ ?



The graph above represents  $f'(x)$  (the derivative of the function  $f(x)$ ) on  $-7 \leq x \leq 5$ . Suppose  $f(-3) = 80$ .

4. Find  $f'(-1)$ ,  $f''(-1)$ ,  $f'(-4)$ , and  $f''(-4)$

5. For what value(s) of  $x$  will the function  $f(x)$  have a local minimum? Justify.

6. For what value(s) of  $x$  will the function  $f(x)$  be concave downward? Justify.