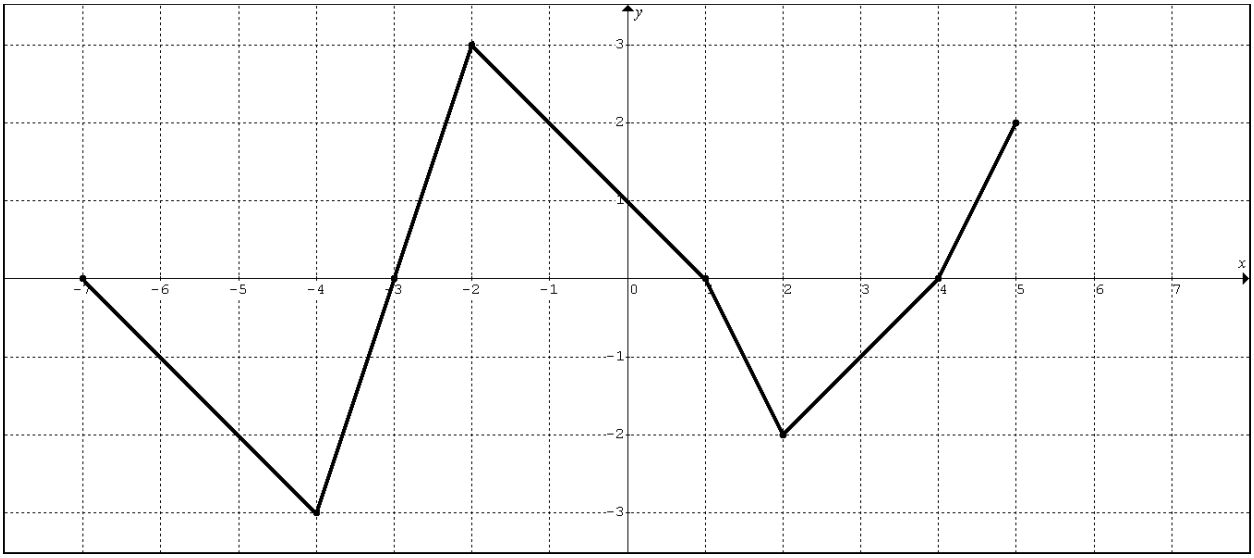
BC:Q301: LESSON 3 – WARM UP

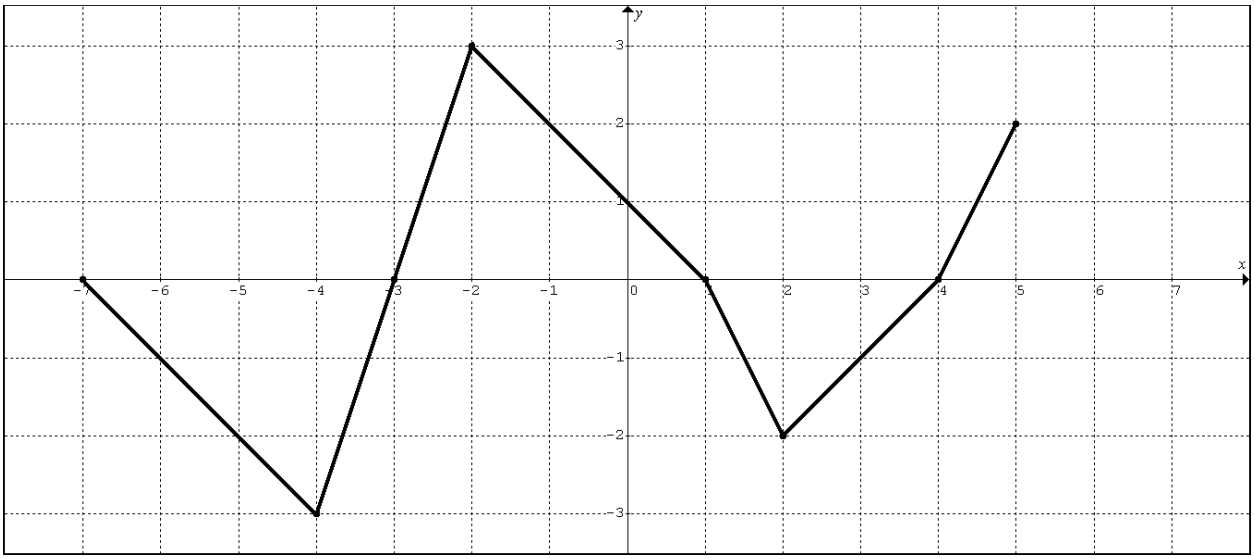


The graph above represents $f'(x)$ (the derivative of the function $f(x)$) on $-7 \le x \le 5$.
Suppose $f(-3) = 80$.

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 $-7 \le x \le 5$?



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

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.