

Name: _____

Mark: _____

Mini-math Div 3/4: Thursday, September 29, 2022 (10 minutes)

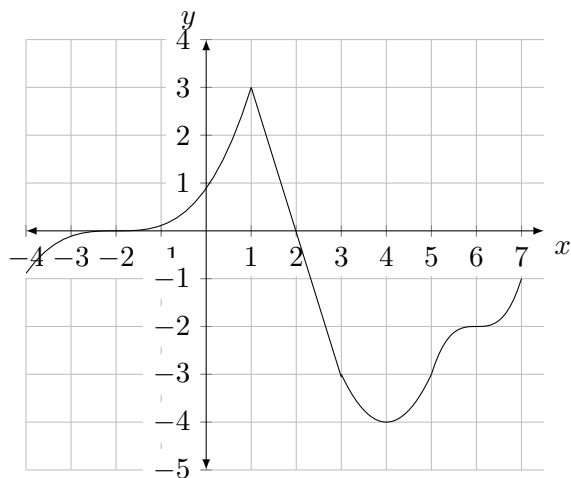
1. (1 point) Suppose $\int_{-2}^5 (2f(x) + 3) dx = 15$, and $\int_3^5 f(x) dx = 10$. What is $\int_{-2}^3 f(x) dx$?
- A. -13 B. -4 C. 5 D. 7

2. (1 point) Evaluate $\int_1^4 \frac{x+4}{\sqrt{x}} dx$.
- A. $-\frac{9}{4}$ B. 7 C. 11 D. $\frac{38}{3}$

3. (1 point) Evaluate $\int_{-1}^1 x(x+1)^2 dx$.
- A. 0 B. $\frac{2}{3}$ C. $\frac{4}{3}$ D. 4

4. (1 point) Suppose $\int_1^5 f'(x) dx = 12$ and $f(5) = 3$. What is $f(1)$?
- A. -15 B. -9 C. 9 D. 15

5. (1 point) The graph of f is below. Let $g(x) = \int_1^x f(t) dt$. At what value(s) of x in the interval $[-4, 7]$ does g have a point of inflection?



- A. exactly one of -2 and 2
- B. both -2 and 2
- C. both 1 and 4
- D. all of $-2, 5$ and 6