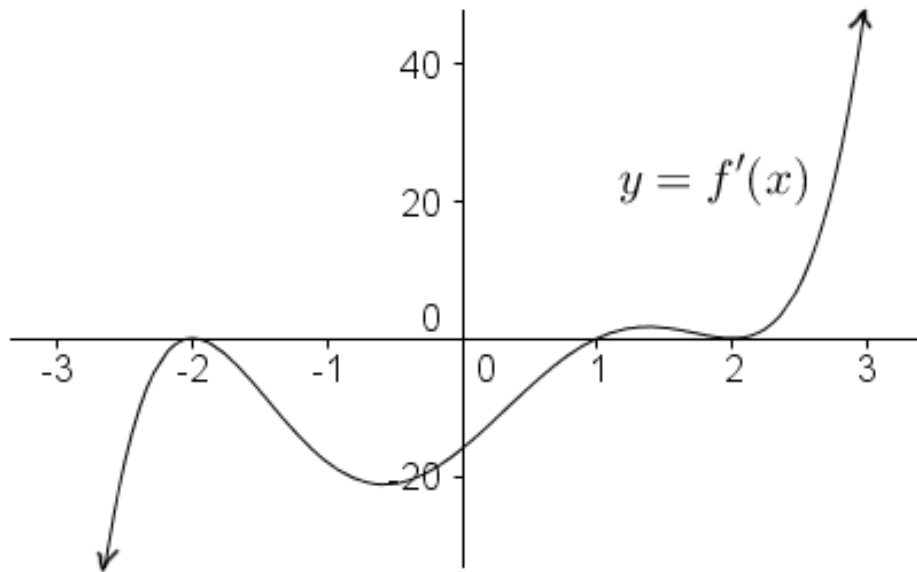


EMCF 25

The questions below refer to the function f .

The graph of the derivative of f is shown below.



1. Give the number of intervals of increase for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.

2. Give the number of intervals of decrease for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
3. Give the number of inflection points for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
4. Give the number of intervals of concave up for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
5. Give the number of intervals of concave down for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
6. Give the number of critical numbers for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
7. Give the number of local minimums for f .
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.

8. Give the largest critical number for $f(x) = x^4 - 4x^3 + 4x^2 + 7$.
- a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
9. Give the number of intervals of decrease for $f(x) = x^4 - 4x^3 + 4x^2 + 7$.
- a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. None of these.
10. Give the number of intervals of concave up for $f(x) = x^4 - 4x^3 + 4x^2 + 7$.
- a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
 - f. None of these