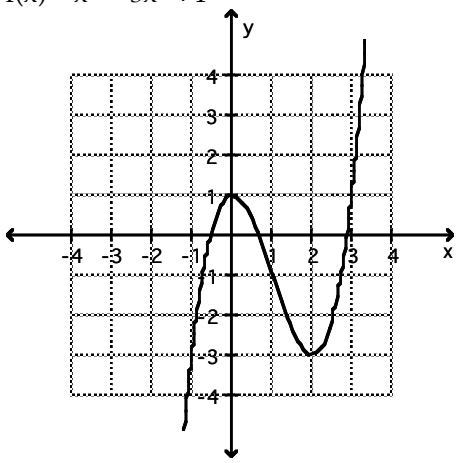
Relative Maxima or Minima

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

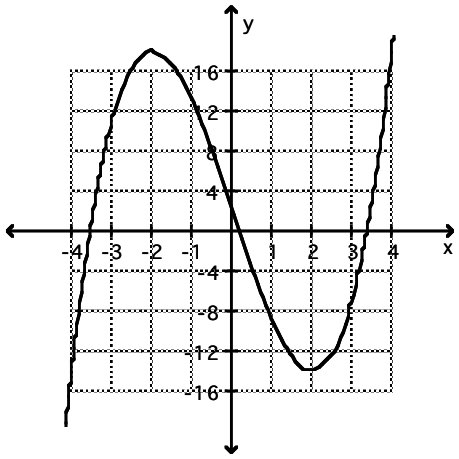
Use the graph of the given function to find any relative maxima and relative minima.

1) $f(x) = x^3 - 3x^2 + 1$ 1) _____



A) maximum: (0, 1); minimum: none
B) no maximum or minimum
C) maximum: (0, 1); minimum: (2, –3)
D) maximum: none; minimum: (2, –3)

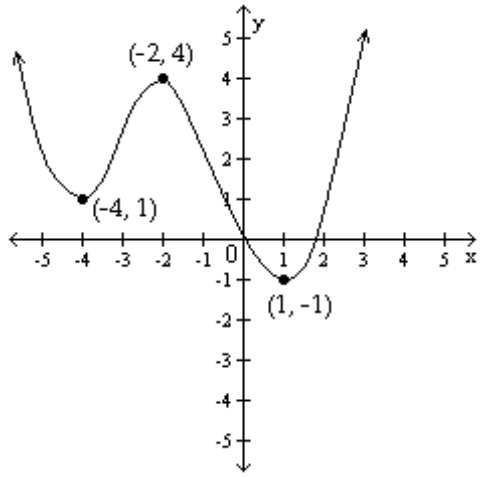
2) $f(x) = x^3 - 12x + 2$ 2) _____



A) maximum: (2, –14); minimum: (–2, 18)
B) no maximum or minimum
C) maximum: (–2, 18) and (0, 0); minimum: (2, –14)
D) minimum: (2, –14); maximum: (–2, 18)

Locate relative maximum and relative minimum points on the graph. State whether each relative extremum point is a turning point.

3) 3) _____



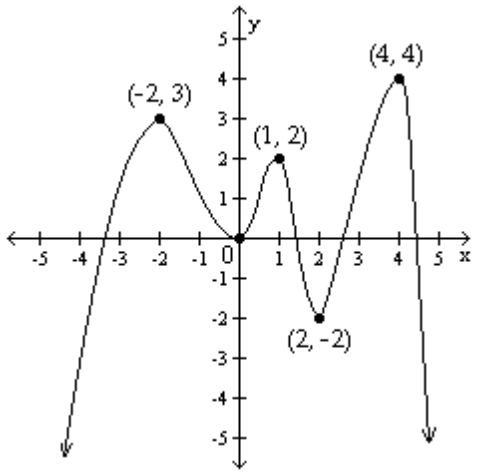
A) (–2, 4) is a relative maximum point and a turning point. (–4, 1) and (1, –1) are relative minima points and turning points.

B) (–2, 4) is a relative maximum. (–4, 1) and (1, –1) are relative minima points.

C) (–2, 4) is a relative maximum and a turning point. (–4, 1) is a relative minimum point and a turning point.

D) (–2, 4) is a relative maximum point and a turning point. (1, –1) is a relative minimum point and a turning point.

4) 4) _____



A) (4, 4) is a relative maximum point and a turning point. (2, –2) is a relative minimum point and a turning point.

B) (–2, 3), (1, 2), and (4, 4) are relative maxima points. (0, 0) and (2, –2) are relative minima points.

C) (–2, 3), (1, 2), and (4, 4) are relative maxima points and turning points. (2, –2) is a relative minimum point and a turning point.

D) (–2, 3), (1, 2), and (4, 4) are relative maxima points and turning points. (0, 0) and (2, –2) are relative minima points and turning points.

Answer Key
Testname: RELATIVE MAXIMA OR MINIMA

1) C
2) D
3) A
4) D