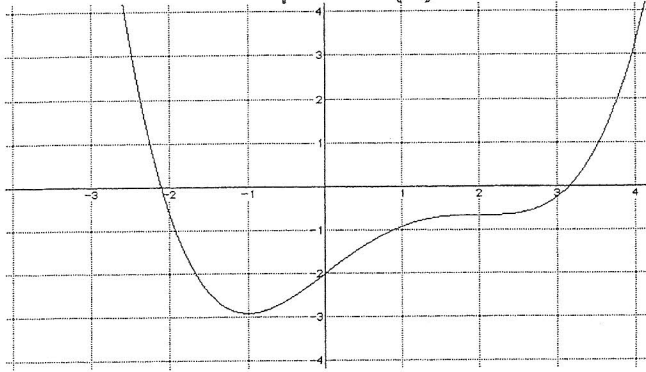


HOW DID THE PRISON DENTIST HELP THE INMATE TO GO STRAIGHT?

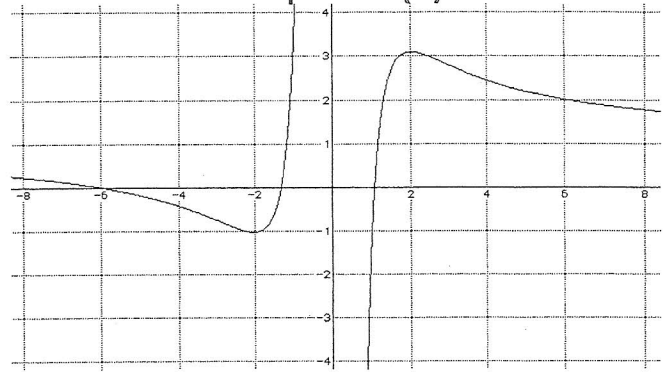
Find the x-coordinates and intervals described: Window $[-8,8] \times [-4,4]$

Graph of $f(x)$



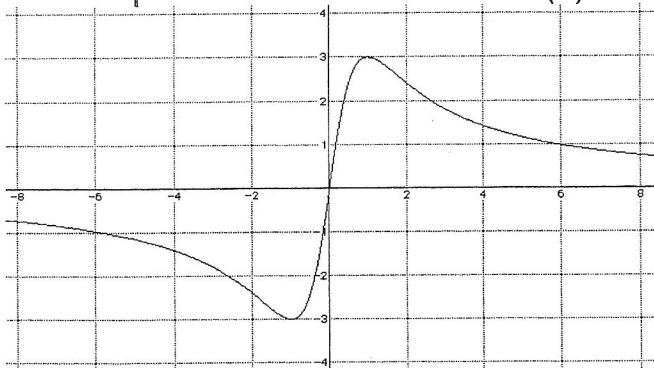
- 1) x-coordinate of local minimum:
- 2) x-coordinate of local maximum:
- 3) x-coordinates of inflection points:
- 4) Intervals where $f(x)$ is increasing:
- 5) Intervals where $f(x)$ is decreasing:
- 6) Intervals where $f(x)$ is concave up:
- 7) Intervals where $f(x)$ is concave down:

Graph of $f(x)$



- 8) x-coordinate of local minimum:
- 9) x-coordinate of local maximum:
- 10) x-coordinates of inflection points:
- 11) Intervals where $f(x)$ is increasing:
- 12) Intervals where $f(x)$ is decreasing:
- 13) Intervals where $f(x)$ is concave up:
- 14) Intervals where $f(x)$ is concave down:
- 15) Equation of vertical asymptote:

Graph of the derivative of $f(x)$



Given the graph of $f'(x)$ to the left, answer the following for $f(x)$.

- 16) x-coordinate of local minimum:
- 17) x-coordinate of local maximum:
- 18) x-coordinates of inflection points:
- 19) Intervals where $f(x)$ is increasing:
- 20) Intervals where $f(x)$ is decreasing:
- 21) Intervals where $f(x)$ is concave up:
- 22) Intervals where $f(x)$ is concave down:

x-coordinates and intervals.

C. $x = -2$	E. $x = 2$	G. $x = 1$	H. $x = \pm 1$	I. none
N. $x = 0$	O. $x = 0, x = 2$	Q. $x = 0, x = 1$	V. $x = -1$	Y. $x = \pm 3$
A. $(0, \infty)$	B. $(-\infty, 0)$	C. $(0, 2)$	M. $(-1, 1)$	O. $(-\infty, -1)$
G. $(-\infty, 0) \cup (2, \infty)$	I. $(-2, 0) \cup (0, 2)$	R. $(-\infty, -2) \cup (2, \infty)$	S. $(-\infty, -1) \cup (1, \infty)$	
T. $(-1, 2) \cup (2, \infty)$	U. $(-\infty, 0) \cup (0, \infty)$	V. $(-3, 0) \cup (3, \infty)$	Y. $(-\infty, -3) \cup (0, 3)$	

20	10

12	9	21	5	1	17	16	6

18	2	22

8	3	15	7	19	13	11	4