

polynomial function can be written in the form:

end behavior when a is positive and degree is odd

$$f(x) = ax^3 + bx^2 + c$$

end behavior when a is negative and degree is even

$$f(x) = ax^4 + bx^3 + c$$

end behavior when a is positive and degree is even

$$f(x) = ax^4 + bx^3 + c$$

end behavior when a is negative and degree is odd

$$f(x) = ax^3 + bx^2 + c$$

intercepts

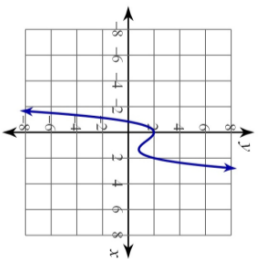
y-intercept

$$f(x) = x^4 - 5x^2 + 6$$

x-intercept

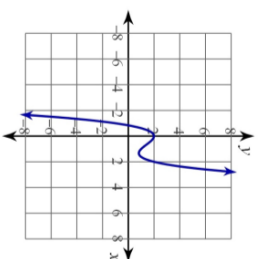
$$0 = x^4 - 5x^2 + 6$$

extrema -



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

point of inflection -



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

Describe the end behavior of the function.

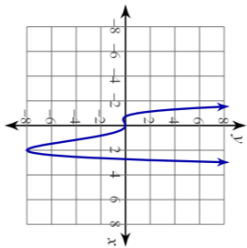
$$f(x) = -x^4 + 3x^2 - x + 2$$

Describe the end behavior of the function.

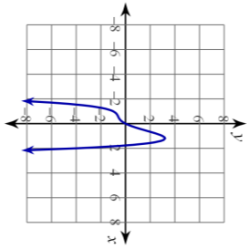
$$f(x) = x^5 - 3x^3 + 3x + 2$$

$$f(x) = x^4 - 2x^3 - 2x^2$$

A)

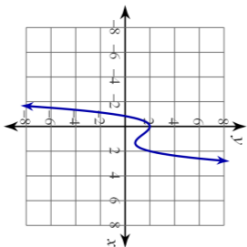


B)

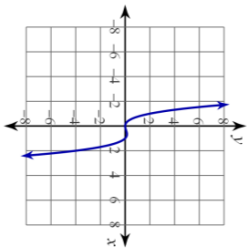


$$f(x) = x^3 - 2x^2 + 2$$

A)

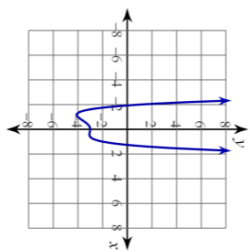


B)

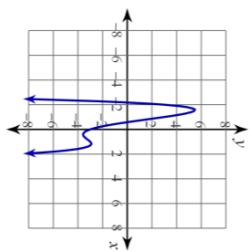


$$f(x) = x^4 + x^3 - x^2 - 3$$

A)

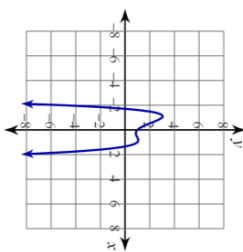


B)

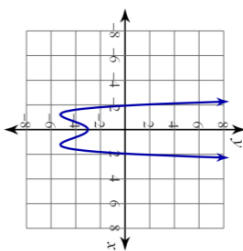


$$f(x) = x^4 - 3x^2 - 3$$

A)

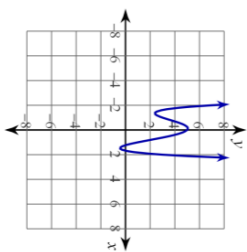


B)

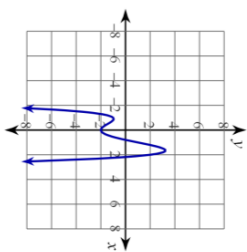


$$f(x) = -x^4 + x^3 + 3x^2 - 2$$

A)

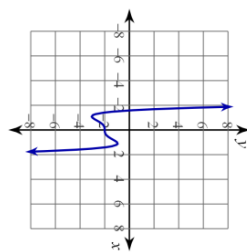


B)



$$f(x) = x^5 - 3x^3 + 1$$

A)



B)

