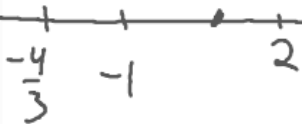


Zeros $-1, -\frac{4}{3}, 2$

$$(3x+4)(x+1)(x-2)^2$$



Solve the polynomial inequality graphically.

13) $x^3 - x^2 - 2x \geq 0$

$$3x^2 - 2x - 8$$

$$(3x+4)(x-2)$$

14) $3x^4 - 5x^3 - 12x^2 + 12x + 16 < 0$

$$\begin{array}{r|rrrrr} 2 & 3 & -5 & -12 & 12 & 16 \\ & & 6 & 2 & -20 & -16 \\ \hline & 3 & 1 & -10 & -8 & 0 \\ & & -3 & 2 & 8 & \\ \hline & & & & & 16 \end{array}$$

Determine the real values of x that cause the function to be a) zero, b) undefined, c) positive, and d) negative

A) $f(x) = \frac{x-4}{(3x+2)(x+3)}$

B) $f(x) = \frac{x-3}{(x+2)\sqrt{x+3}}$

C) $f(x) = \frac{\sqrt{x-3}}{(x+2)(x-5)}$