

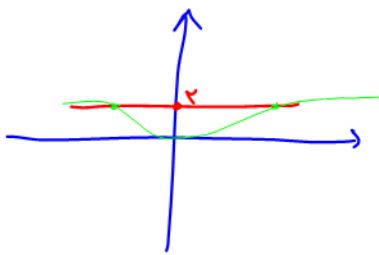


$$\frac{m(m^2+m)}{m-2} \rightarrow \frac{0^*}{-1} - \frac{2}{0} + \Rightarrow m = (2, +\infty)$$

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$$\frac{(x-3)(x+2)(x^2-x-6)(x-1)^2}{(x^2+x+1)(2-x)^2} \leq 0 \Rightarrow \frac{-2}{+} \frac{1^*}{-} \frac{2}{0} \frac{3}{+} \frac{3}{-} \Rightarrow x = (-\infty, -2] \cup (2, 3]$$

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$$\frac{x^2-2x}{x^2+4} < 2 \rightarrow \frac{x^2-2x}{x^2+4} - 2 < 0 \Rightarrow \frac{x^2-2x-8}{x^2+4} < 0$$

(x-4)(x+2) → x = -2, 4

$$b-a = 4 - (-2) = 6 \Rightarrow x = (-2, 4)$$

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$$-1 < \frac{x^2-4x}{x+1} \rightarrow 0 < \frac{x^2-4x}{x+1} + 1 \rightarrow \frac{-1}{-1} \Rightarrow -1 < x$$

$$\frac{x^2-4x}{x+1} < 0 \rightarrow \frac{x(x-4)}{x+1} \rightarrow \frac{-1}{-1} \frac{0}{0} \frac{4}{+} \Rightarrow x = (-\infty, -1) \cup (0, \frac{4}{3})$$

} x = (0, \frac{4}{3})

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$$\frac{x^2-1}{x} \leq 3 \rightarrow \frac{x^2-1}{x} - 3 \leq 0 \rightarrow \frac{x^2-3x-1}{x} \leq 0 \rightarrow \frac{-1}{-1} \frac{0}{0} \frac{3}{-} \frac{1}{+} \Rightarrow x = (-\infty, -2] \cup (0, 3]$$

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