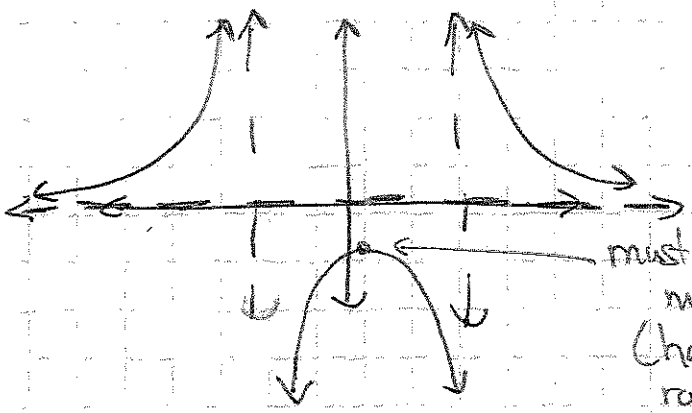
March 9/16

Reciprocals of Quadratics Continued

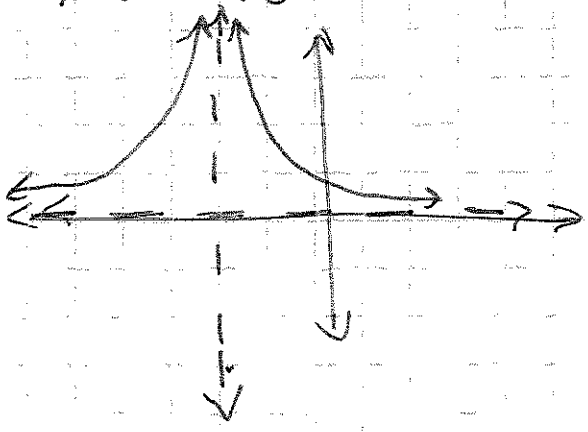
What did you notice? $y = \frac{k}{ax^2+bx+c}$ ← constant.

- if ax^2+bx+c has 2 distinct real roots.



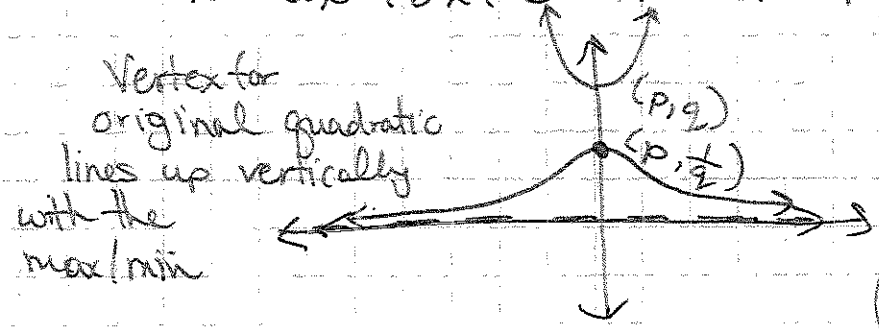
eg. $y = \frac{1}{(x+3)(x-2)}$

- if ax^2+bx+c has 2 equal real roots



eg. $y = \frac{1}{(x+2)^2}$

- if ax^2+bx+c has no real roots



eg. $y = \frac{1}{x^2+3}$

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