

Factor $240x^2 - 223x - 561$

Sledgehammer

$$b^2 - 4ac = 223^2 - 4(240)(-561) = 588289 \leadsto \sqrt{588289} = 767$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{223 \pm 767}{2(240)} \rightarrow \begin{matrix} \frac{33}{16} \\ -\frac{17}{5} \end{matrix}$$

$$\Rightarrow f(x) = \frac{240}{(16)(15)} \left(x - \frac{33}{16}\right) \left(x + \frac{17}{15}\right) = (16x - 33)(15x + 17)$$

$$= (16x - 33)(15x + 17)$$

College Algebra Take on a rational function.

https://harryzaims.com/public_html/121-online/videos/03-Writing-Projects/Writing-Project-3/New-Videos/video/08-Graph-Rational-Function.mp4

The Same Rational Function, with a hole:

https://harryzaims.com/public_html/121-online/videos/03-Writing-Projects/Writing-Project-3/New-Videos/video/09-Rat-Func-with-Hole.mp4

Rational Function with a slant asymptote.

https://harryzaims.com/public_html/121-online/videos/03-Writing-Projects/Writing-Project-3/New-Videos/video/10-Slant-Asymptote.mp4

LINK TO COLLEGE ALGEBRA "WRITING PROJECT #3" FROM PREVIOUS SEMESTERS:

https://harryzaims.com/public_html/121-online/videos/03-Writing-Projects/Writing-Project-3/old-writing-project-3s/

There are examples and videos on them.

Instructional notes for Rational Functions in College Algebra:

Instructional videos for Rational Functions in College Algebra.