

Graphing Simple Rational Functions Answers

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Graphing Simple Rational Functions Date_____ Period_____ Identify the vertical asymptotes, horizontal asymptote, domain, and range of each. 1) $f(x) = \frac{4}{x+2}$ 2) $f(x) = \frac{4}{x-1} + 1$ 3) $f(x) = \frac{3}{x-1} - 1$ 4) $f(x) = \frac{3}{x}$ Identify the vertical asymptotes, horizontal asymptote, domain, and range of each. Then sketch the graph. 5) $f(x) = 3x + 1$

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8.1 Graphing Simple Rational Functions Essential Question: How are the graphs of $f(x) = \frac{k}{x-h} + k$ related to the graph of $y = \frac{1}{x}$ and $y = h$? Graphing and Analyzing $f(x) = \frac{p(x)}{q(x)}$ Explore 1 A rational function is a function of the form $f(x) = \frac{p(x)}{q(x)}$ where $p(x)$ and $q(x)$ are polynomials, where $q(x) \neq 0$.

8.1 Graphing Simple Rational Functions.notebook

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Graphing Simple Rational Functions

Section 4-8 : Rational Functions. The line $x=a$ is a vertical asymptote if the graph increases or decreases without bound on one or both sides of the line as x moves in closer and closer to $x=a$. The line $y=b$ is a horizontal asymptote if the graph approaches $y=b$ as x increases or decreases without bound.

Algebra - Rational Functions

Additions and changes to the original content are the responsibility of the instructor. 123. Graphing Simple Rational Functions. Practice and Problem Solving: A/B. Using the graph of $y = \frac{1}{x}$ as a guide, describe the transformation and graph the function.

Graphing Simple Rational Functions 8-1 Practice and ...

Graphs of rational functions (old example) Our mission is to provide a free, world-class education to anyone, anywhere. Khan Academy is a 501(c)(3) nonprofit organization.

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Graphing Rational Functions: Introduction (page 1 of 4) Sections: Introduction, Examples, The special case with the "hole" To graph a

rational function, you find the asymptotes and the intercepts , plot a few points, and then sketch in the graph.

Graphing Rational Functions: Introduction

Here is a set of practice problems to accompany the Rational Functions section of the Common Graphs chapter of the notes for Paul Dawkins Algebra course at Lamar University.

Algebra - Rational Functions (Practice Problems)

Worksheets are Graphing simple rational functions, Graphing simple rational, Graphing simple rational functions, Graphing rational, Work rational functions, Prec12 rational functions name work, Rational expressions work, 9 rational functionswork.

Graphing Simple Rational Functions Worksheets - Lesson ...

Class: _____ Date: _____
Rationals Multiple Choice Post-Test Multiple Choice Identify the choice that best completes the statement or answers the question.
_____ 1 Which family of functions does $y = 4x^2$ belong to? A Trigonometric C Exponential B Logarithmic D Rational
_____ 2 Which of the following functions is not rational? A $f(x) = 1/x$ C $f(x) = \dots$

Name: Class: Date: Rationals Multiple Choice Post-Test

Explain 1 Graphing Simple Rational Functions. When graphing transformations of $f(x) = 1/x$, it helps to consider the effect of the transformations on the following features of the graph of $f(x)$: the vertical asymptote, $x = 0$; the horizontal asymptote, $y = 0$; and two reference points, $(-1, 1)$ and $(1, 1)$.

Correction Key=NL-D;CA-D Name Class Date 8.1 Graphing ...

Section 7.3 Graphing Rational Functions 643 Version: Fall2007 Asymptote or Hole? To determine whether the graph of a rational function has a vertical asymptote or a hole at a restriction, proceed as follows: 1. Factor numerator and denominator of the original rational function. Identify the restriction(s). 2. Reduce the rational function to lowest terms, naming the new function g .

7.3 Graphing Rational Functions

"Graphing Rational Functions" Worksheet #1 – Horizontal Asymptotes Find the domain, vertical asymptotes, and horizontal asymptotes for the following rational functions.

Name _____ Date ...

A rational function can be written as a ratio of two polynomials. $f(x) = \frac{a(x-h)^k}{(x-h)^k}$ There is a vertical asymptote at $x = h$ and the domain is $\{x \mid x \neq h\}$. There is a horizontal asymptote at $y = k$ and the range is $\{y \mid y \neq k\}$. Identify h and k to graph rational functions of the form $f(x) = \frac{a}{(x-h)^k}$.
Graph $g(x) = \frac{1}{x^2}$ 3. Vertical asymptote at $x = 2$.

LESSON Reteach Rational Functions

Graphing Rational Functions With Vertical, Horizontal & Slant Asymptotes, Holes, Domain & Range - Duration: 54:04. The Organic Chemistry Tutor 216,454 views

Graphing Simple Rational Functions

Answer: Domain: all reals except $x = -5$, zeros: $x = 3$, $x = -3$, no horizontal asymptote, no holes. Return to Exercises. Scott and Ian design a cool T-shirt for snow boarders. Their friends are very impressed and everybody wants one, so Scott and Ian set up a T-shirt printing business in their garage.

Answers to Questions on Rational Functions

Voiceover: Right over here, I have the graph of f of x , and what I want to think about in this video is whether we could have sketched this graph just by looking at the definition of our function, which is defined as a rational expression. We have $2x$ plus 10 over $5x$ minus 15 . There is a couple of ...

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9.2 Graphing Simple Rational Functions 9.3 Graphing General Rational Functions 9.4 Multiplying and Dividing Rational Expressions 9.5 Addition, Subtraction, and Complex Fractions 9.6 Solving Rational Equations

Chapter 9 : Rational Equations and Functions : 9.2 ...

This section covers: Revisiting Direct and Inverse Variation Polynomial Long Division Asymptotes of Rationals Drawing Rational Graphs — General Rules Finding Rational Functions from Graphs or Points Applications of Rational Functions More Practice Again, Rational Functions are just those with polynomials in the numerator and denominator, so they are the ratio of two polynomials.

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Algebra - Rational Functions

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Algebra - Rational Functions

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Graphing Rational Functions: Introduction

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