

# Algebra 2

## 7-05 Solving Rational Equations

### Solve Rational Equations

- Only when the \_\_\_\_\_ is present!!!
- Method 1: \_\_\_\_\_ both sides and \_\_\_\_\_ multiply
- Method 2:
  1. \_\_\_\_\_ both sides by \_\_\_\_\_ to remove fractions
  2. \_\_\_\_\_
  3. \_\_\_\_\_ answers

$$\frac{x}{2x+7} = \frac{x-5}{x-1}$$

$$\frac{4}{2x} = \frac{5}{x+6}$$

$$\frac{6x}{x+4} + 4 = \frac{2x+2}{x-1}$$

$$\frac{3}{2} + \frac{1}{x} = 2$$

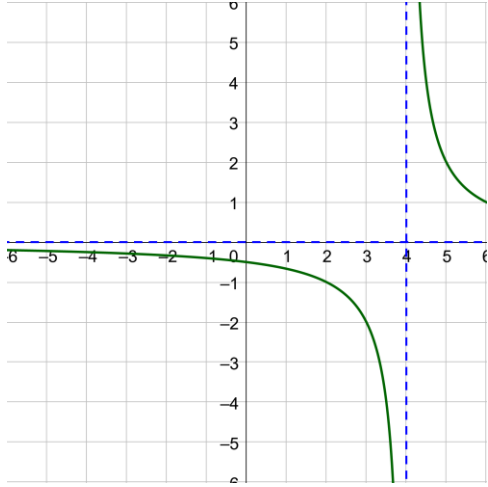
**Determine if the inverse of a function is a function**

1. \_\_\_\_\_ the function
2. If any \_\_\_\_\_ line touches the graph more than once, then the inverse is \_\_\_\_\_ a function

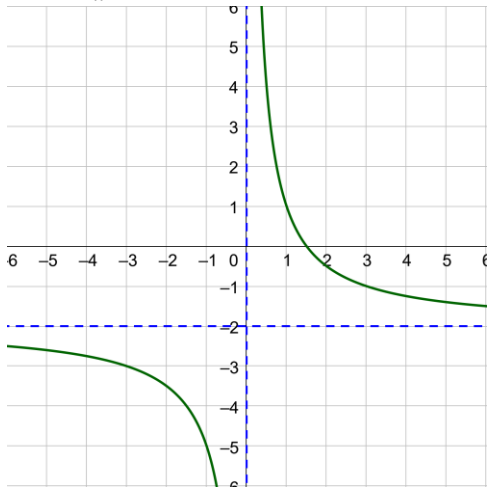
**Finding Inverse of Rational Functions**

1. \_\_\_\_\_  $x$  and  $y$
2. \_\_\_\_\_ for  $y$

$f(x) = \frac{2}{x-4}$ . Determine whether the inverse of  $f$  is a function. Then find the inverse.



$f(x) = \frac{3}{x} - 2$ . Determine whether the inverse of  $f$  is a function. Then find the inverse.



390 #1, 5, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 35, 37, 39, 57, 59, 61, 63, 65 = 20