

**LESSON 7.4** Assignment

Name \_\_\_\_\_ Date \_\_\_\_\_

**There's a Hole In My Function, Dear Liza**  
**Graphical Discontinuities**

1. Consider the rational function  $f(x) = \frac{x - 4}{x^2 - 4x}$ .

- a. Determine any vertical and horizontal asymptotes and any removable discontinuities of the graph of  $f(x)$ . Explain your reasoning.

- b. Sketch the graph of  $f(x)$  without a calculator. Explain your reasoning.



