

**Lessons 5.4 and 5.5 Quiz Review**

Solve each equation. Check your solution.

1. 
$$\frac{4}{a^2} - \frac{1}{2a} = \frac{a-4}{6a^2}$$



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2. 
$$\frac{1}{k} = \frac{5}{3k^2} + \frac{k-1}{6k^2}$$

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3. 
$$\frac{2}{a^2+6a} = \frac{1}{a^2+6a} - \frac{1}{a}$$

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4. 
$$\frac{6}{x^2+4x} = \frac{5}{x} + \frac{1}{x^2+4x}$$

$$5. \frac{1}{b^2-4b+4} + \frac{1}{b-2} = \frac{5}{b^2-4b+4}$$

$$6. \frac{1}{x+2} + \frac{1}{x^2-4x-12} = \frac{4}{x-6}$$

Identify the zeros, vertical asymptotes, horizontal asymptotes, and holes of each function.

$$7. f(x) = \frac{x^2+x-6}{x^2-4}$$

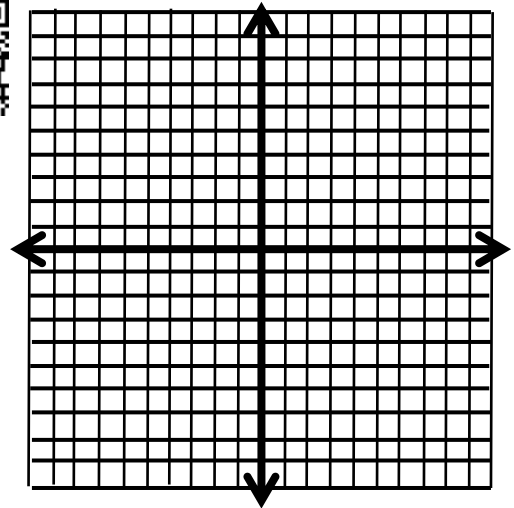


Zeros: \_\_\_\_\_

VA: \_\_\_\_\_

HA: \_\_\_\_\_

Holes: \_\_\_\_\_



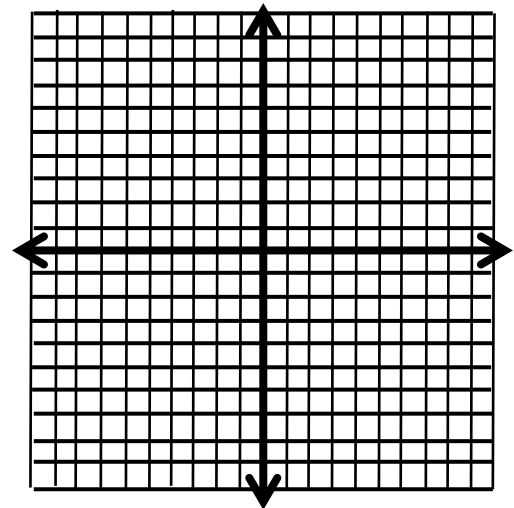
$$8. f(x) = \frac{x^2+x-6}{-4x+4}$$

Zeros: \_\_\_\_\_

VA: \_\_\_\_\_

HA: \_\_\_\_\_

Holes: \_\_\_\_\_



9.  $f(x) = \frac{x^2+2x-3}{x^2-x-6}$

Zeros: \_\_\_\_\_

VA: \_\_\_\_\_

HA: \_\_\_\_\_

Holes: \_\_\_\_\_

