

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

## Graphing Rational Functions Worksheet 2

Find the VA and HA of the following:

1.  $\frac{x^2 + 4x - 5}{x^2 + 9x + 20}$

VA \_\_\_\_\_

HA \_\_\_\_\_

2.  $\frac{x^2 - 9}{x + 3}$

VA \_\_\_\_\_

HA \_\_\_\_\_

3.  $\frac{x + 6}{2x^2 + 9x - 18}$

VA \_\_\_\_\_

HA \_\_\_\_\_

Graph each equation and fill in all the blanks.

4.  $y = \frac{3}{x + 2}$

Domain \_\_\_\_\_

VA \_\_\_\_\_

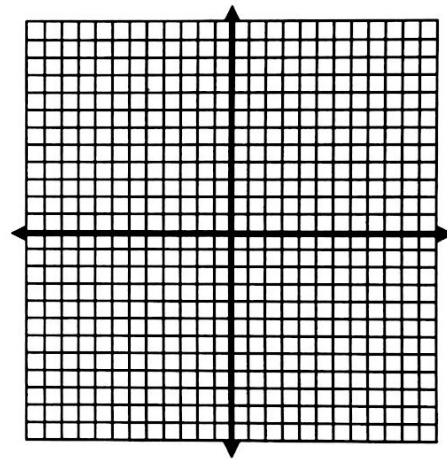
Holes \_\_\_\_\_

x-int \_\_\_\_\_

y-int \_\_\_\_\_

HA \_\_\_\_\_

Continuous/Discontinuous \_\_\_\_\_



5.  $y = \frac{x^2 - 9}{x - 3}$

Domain \_\_\_\_\_

VA \_\_\_\_\_

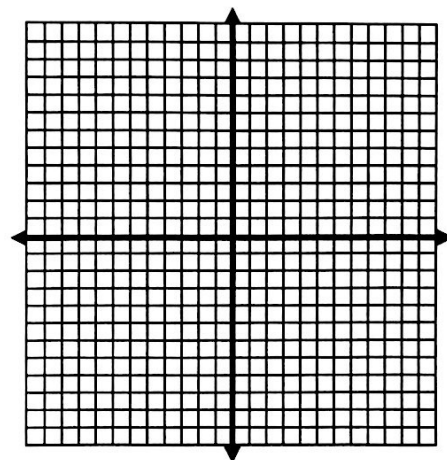
Holes \_\_\_\_\_

x-int \_\_\_\_\_

y-int \_\_\_\_\_

HA \_\_\_\_\_

Continuous/Discontinuous \_\_\_\_\_



$$6. y = \frac{x^2 - 2x - 3}{x - 2}$$

Domain \_\_\_\_\_

VA \_\_\_\_\_

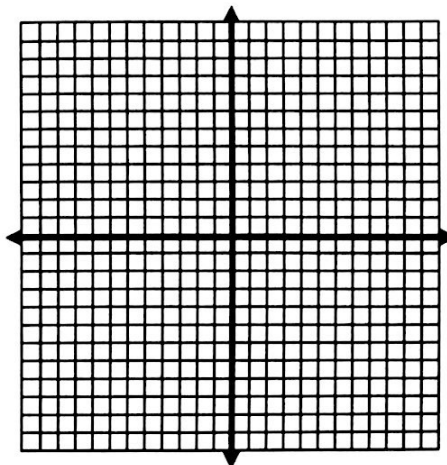
Holes \_\_\_\_\_

x-int \_\_\_\_\_

y-int \_\_\_\_\_

HA \_\_\_\_\_

Continuous/Discontinuous \_\_\_\_\_



$$7. y = \frac{x+1}{(x-3)^2}$$

Domain \_\_\_\_\_

VA \_\_\_\_\_

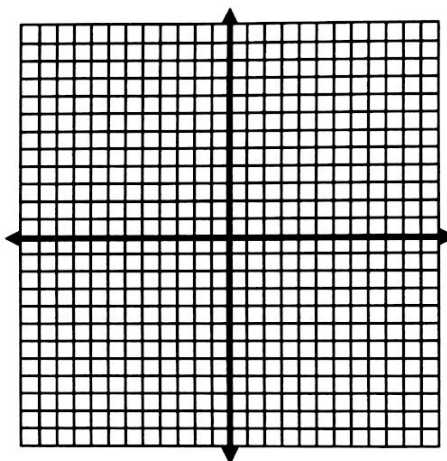
Holes \_\_\_\_\_

x-int \_\_\_\_\_

y-int \_\_\_\_\_

HA \_\_\_\_\_

Continuous/Discontinuous \_\_\_\_\_



$$8. y = \frac{x-4}{-4x-16}$$

Domain \_\_\_\_\_

VA \_\_\_\_\_

Holes \_\_\_\_\_

x-int \_\_\_\_\_

y-int \_\_\_\_\_

HA \_\_\_\_\_

Continuous/Discontinuous \_\_\_\_\_

