



D) VA: none  
Hole:  $x=0$   $(0, -9)$

HA: none

X-int:  $x=9$

Y-int:  $y=-9$

EQUATION

$$y = \frac{x(x-9)}{x}$$

A) VA:  $x=-3$  and  $x=3$   
Holes: none. therefore no common factors between the numerator & denominator

HA:  $y=1$   $\therefore \deg p(x) = \deg q(x)$

$$y = \frac{a}{b}$$

$$y = \frac{1}{1} = 1$$

X-int:  $x=0$

Y-int:  $y=0$

EQUATION:

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

B) VA:  $x=0$

Holes: none

HA:  $y=1$

X-int:  $x=-3$   $x=3$

Y-int: none

EQUATION:

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

C) VA:  $x=9$

Hole:  $x=0$  at  $(0,0)$

HA:  $1.5$  or  $\frac{3}{2}$   $\deg p(x) = \deg q(x)$

X-int: 0

Y-int: 0

EQUATION

$$y = \frac{3x^2}{2x(x-9)}$$