

Phase Plane Diagrams for Autonomous Differential Equations

`help(phaseportrait);`

Predator-Prey

Phase Portraits for Autonomous Systems

Plot Window

$\leq x \leq$,

$\leq y \leq$

Differential Equations

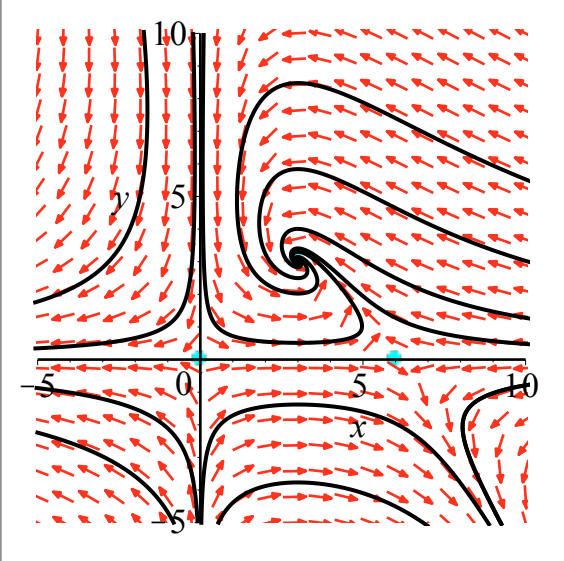
$\dot{x} = F(x, y) =$

$\dot{y} = G(x, y) =$

Equilibrium (Critical) Points

Parameter

$\leq t \leq$



Predator-Prey

Phase Portraits for Autonomous Systems

Plot Window

$$\boxed{-5} \leq x \leq \boxed{20},$$

$$\boxed{-5} \leq y \leq \boxed{20}$$

Differential Equations

$$\dot{x} = F(x, y) =$$

$$x \cdot (6 - y)$$

$$\dot{y} = G(x, y) =$$

$$y \cdot (x - 3)$$

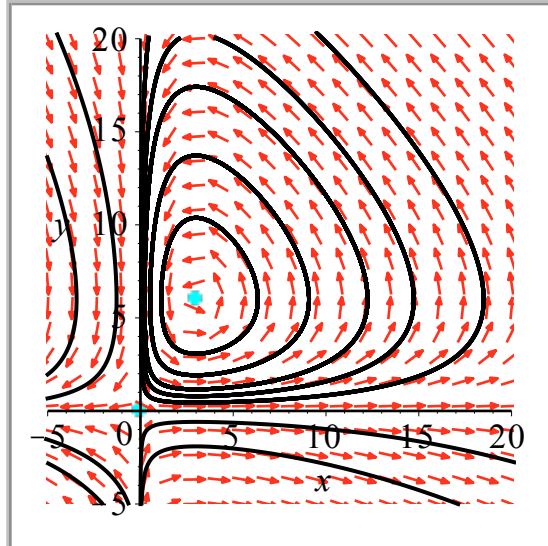
Equilibrium (Critical) Points

$$[0, 0], [3, 6]$$

Parameter

$$\boxed{-10} \leq t \leq \boxed{10}$$

Enter Data



Erase Phase Portrait

Clear All

Competition

Phase Portraits for Autonomous Systems

Plot Window

$$\boxed{-5} \leq x \leq \boxed{10},$$

$$\boxed{-5} \leq y \leq \boxed{10}$$

Differential Equations

$$\dot{x} = F(x, y) =$$

$$x \cdot (6 - x - y)$$

$$\dot{y} = G(x, y) =$$

$$y \cdot (8 - x - 2 \cdot y)$$

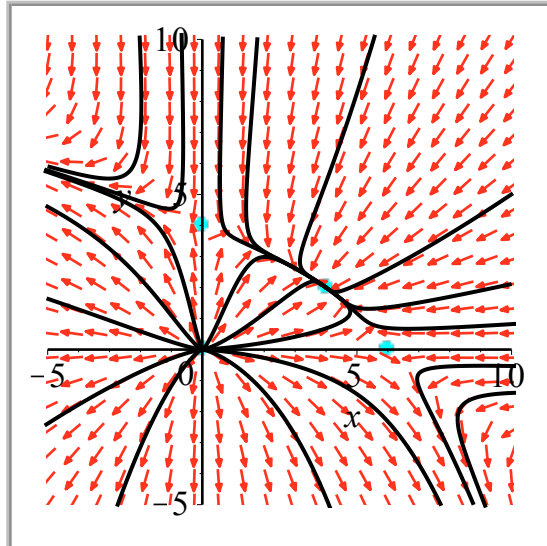
Equilibrium (Critical) Points

$$[0, 0], [0, 4], [6, 0], [4, 2]$$

Parameter

$$\boxed{-10} \leq t \leq \boxed{10}$$

Enter Data



Erase Phase Portrait

Clear All