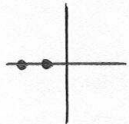
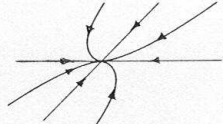
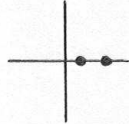
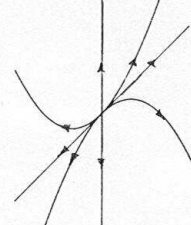
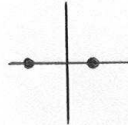
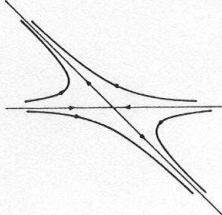
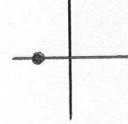
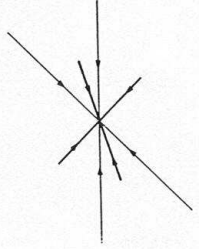
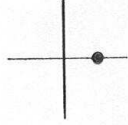
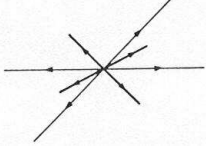
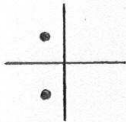

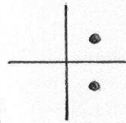

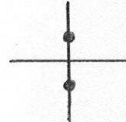
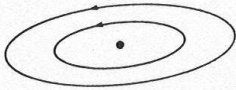
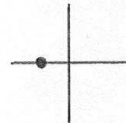
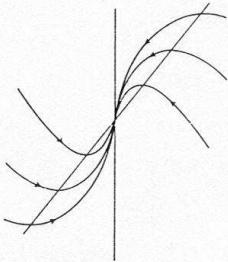


# Fixed Points in 2D Phase Space [msl10]

	Eigenvalues of $A$	Name	Flow	
	$\lambda_1 < \lambda_2 < 0$	Stable node		attractor
	$\lambda_1 > \lambda_2 > 0$	Unstable node		repellor
	$\lambda_1 < 0 < \lambda_2$	Hyperbolic point (unstable)		
	$\lambda_1 = \lambda_2 < 0$ $b = c = 0$	Stable star		attractor
	$\lambda_1 = \lambda_2 > 0$ $b = c = 0$	Unstable star		repellor

[Percival and Richards 1982]

Eigenvalues of $A$	Name	Flow	
 $\lambda_1 = \lambda_2^* = \alpha + i\omega$ $\alpha < 0$	Stable spiral point		attractor
 $\lambda_1 = \lambda_2^* = \alpha + i\omega$ $\alpha > 0$	Unstable spiral point		repellor
 $\lambda_1 = \lambda_2^* = i\omega$	Elliptic point		
 $\lambda_1 = \lambda_2 < 0$ $b \neq 0 \text{ or } c \neq 0$	Stable improper node		attractor

The unstable improper node with  $\lambda_1 = \lambda_2 > 0$  has a similar diagram with the arrows reversed. We do not consider those cases in which eigenvalues are zero.

[Percival and Richards 1982]