# State Variables: X, Y, Z

# Regime Graph:

### Regime: regime1

$$dX/dt = (5-X)/2$$

$$dY/dt = (X-Y)/5$$

$$dZ/dt = (1-XZ)$$

#### **Transition: t1**

## **Transition: t2**

# Regime: regime2

$$dX/dt = (5-X)/2$$
$$dY/dt = 0$$
$$dZ/dt = -Z$$

**Transition: t3** 



## Regime: regime3

$$dX/dt = 0$$

$$dY/dt = (X-Y)/5$$

$$dZ/dt = 0$$

Transition