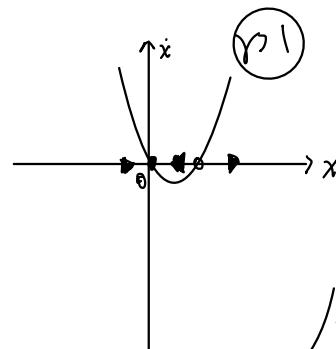
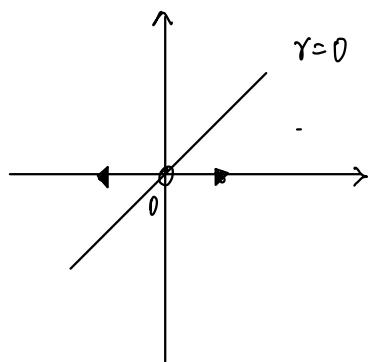
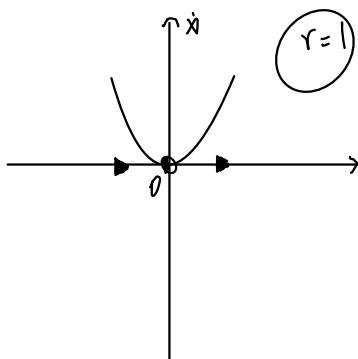
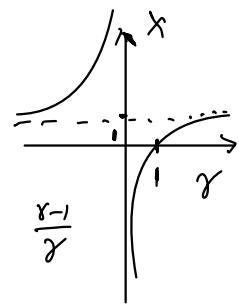


$$3.2.3 \dot{x} = x - rx(1-x)$$



$$x - rx + rx^2 = 0.$$

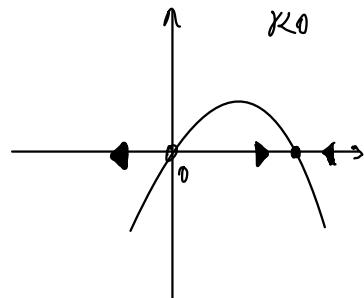
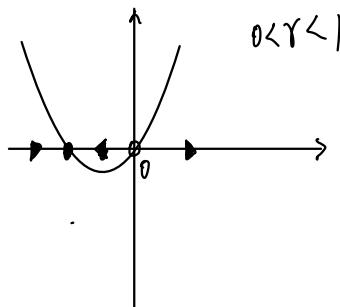
$$x = \frac{r-1}{r}$$



① $r > 1$

② $0 < r < 1$

③ $r < 0$



r gradual coincidence of stability points. from $-\infty$ to / then exchange stability after /