8.1 supplemental HW

1.) Which of the following could be the general solution to the differential equation whose direction field is given below:

A) $y = t + C$ **B)** $y = 2t + C$

C) $y = \frac{1}{2}t + C$ **D)** $y = -\frac{1}{2}t + C$
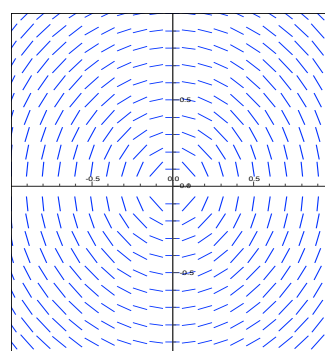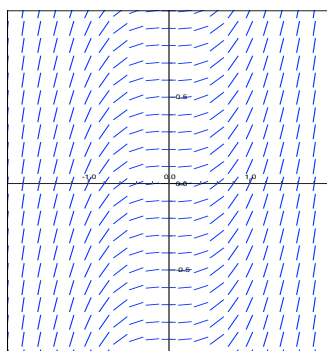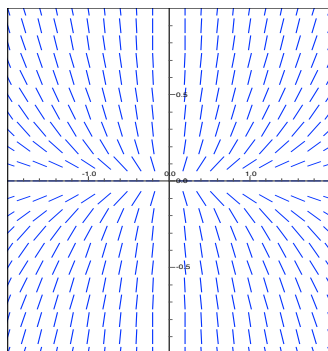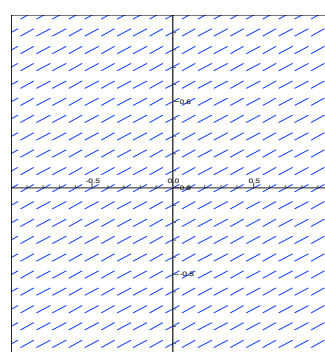
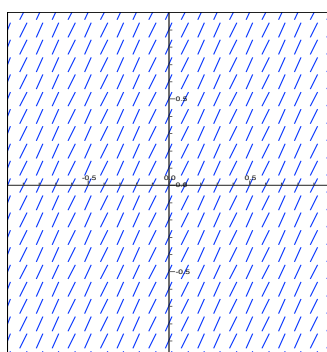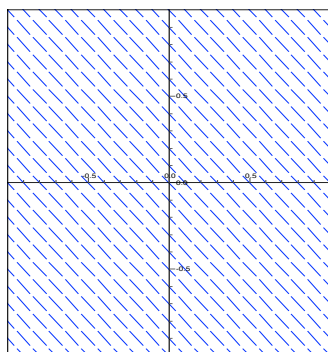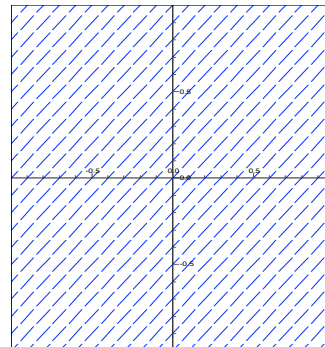**E)** $y = -t + C$ **F)** $y = -2t + C$

G) $y = ln|t| + C$ **H)** $y = C$

I) $y = \frac{Ct^3}{3}$ **J)** $y = \frac{t^3}{3} + C$

K) $x^2 + y^2 = C$

2.) Circle the differential equation whose direction field is given below:

A) $y' = t^2$ **B)** $y' = \frac{1}{2}$

C) $y' = 1$ **D)** $y' = -1$

E) $y' = y + 1$ **F)** $y' = y - 2$

G) $y' = (y+1)(y-2)$ **H)** $y' = (y+1)^2(y-2)^2$

I) $y' = (y+1)(y-2)^2$ **J)** $y' = (y+1)^2(y-2)$

K) $y = -\frac{t}{y}$