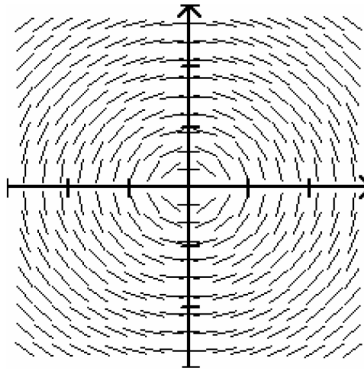


**Quiz 3**  
Mar. 28, 2007

1. (8 pts) Select the differential equation which corresponds to the direction field below.
- |                          |                          |
|--------------------------|--------------------------|
| A) $y' = -\frac{3}{4y}$  | B) $y' = -\frac{3y}{4x}$ |
| C) $y' = -\frac{3x}{4y}$ | D) $y' = -\frac{3}{y^2}$ |



2. (2 pts) Solve the initial value problem  $y'(t) = 2y(t)$ ,  $y(0) = 0$ .  $y(t) =$  \_\_\_\_\_
3. (10 pts) Solve the initial value problem  $y'(t) = \frac{2t}{y(t)}$ ,  $y(0) = -2$ .