

Engineering Mathematics I---Quiz-1

Oct. 12, 2005

- 1) **Solve** $\frac{dy}{dx} = \frac{2y^2 + y - 3}{3y + 2}$ (**separable DE**)
- 2) **Solve** $(5x - y + 4) + (x - 5y - 4)\frac{dy}{dx} = 0$ (**separable DE**)
- 3) **To determine the degree, order and linear of the DE.**
 - (1) $(1 - x)y'' - 4xy' + 5y = \cos x$
 - (2) $\frac{d^2y}{dx^2} = \sqrt{1 + \left(\frac{dy}{dx}\right)^2}$