Math 225 – Quiz #8: Cauchy-Euler Equations
Clearly and neatly show all work for each problem. Solutions with no work will receive no credit.

Find the general solution for the following differential equations.

(1) $x^3 y''' - 6y = 0$

(2) $xy'' - 4y' = x^4$

(3) $x^2 y'' - 5xy' + 8y = 0,$ $\quad y(2) = 32, \quad y'(2) = 0$