1. [5pts] Classify as regular or irregular each singular point of the DE

\[ x^3 (x - 1)^2 (x^2 - 4)y'' + 4x (x - 1) y' - (x + 2) y = 0 \]

2. [5pts] Find the indicial equation and the indicial roots of the DE

\[ 2xy'' - (3 + 2x) y' + y = 0 \]

\((x = 0 \text{ is a regular singular point for this DE})\)