

Problem 23

In each of Problems 23 and 24, determine the values of α , if any, for which all solutions tend to zero as $t \rightarrow \infty$; also determine the values of α , if any, for which all (nonzero) solutions become unbounded as $t \rightarrow \infty$.

$$y'' - (2\alpha - 1)y' + \alpha(\alpha - 1)y = 0$$