1. For the following diff. eq. determine the critical (equilibrium) solution and decide whether it is asymptotically stable, unstable, or semi-stable.

\[ \frac{dy}{dt} = 5y - 15 \ . \]

2. For the following diff. eq. determine the critical (equilibrium) solution(s) and decide whether they are asymptotically stable, unstable, or semi-stable.

\[ \frac{dy}{dt} = 2y^2 - 18 \ . \]