## 6.2: Solving IVPs with Laplace Transforms

## Examples:

Use the Laplace Transform to solve $y^{\prime \prime}+y^{\prime}-6 y=0, y(0)=1, y^{\prime}(0)=2$.

Use the Laplace Transform to solve $y^{\prime \prime}+y=\sin (2 t), y(0)=2, y^{\prime}(0)=1$.

Use the Laplace Transform to solve $y^{\prime \prime}+2 y^{\prime}+y=4 e^{-t}, y(0)=2, y^{\prime}(0)=-1$.

