Problem 1

Find the general solution to $Y' = AY$ where

$$A = \begin{pmatrix} 2 & 1 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 4 \end{pmatrix}$$

Problem 2

Find the general solution to $Y' = AY$ where

$$A = \begin{pmatrix} 1 & 1 & 3 \\ 0 & 5 & 1 \\ 0 & 0 & 2 \end{pmatrix}$$