

**King Fahd University Of Petroleum & Minerals**  
**Department of Mathematics & Statistics**  
**STAT416 : Stochastic Processes for Actuaries (181)**  
**Assignment # 2** (Due in Tuesday, October 3, 2018)

Do the following problems as appear in their order.

Problem.1 Use algebra to solve problem 6 page 261 of your text book.  
(**Hint.** Find the eigenvalues and the corresponding eigenvectors)

Problem.2 Solve problem 14 page 262 of your text book.