Goode:
Section 3.1 p. 171 #1, 5, 6, 9, 16, 17, 18
Section 3.2 p. 183 #1, 3, 4, 7, 10, 12, 13a, 25, 26, 29

HINT for 3.2 #29: In a problem like this the definitions tell you what you need to show. “Symmetric” means $S = S^T$, so show these two matrices are equal. Properties established in Theorem 3.2.3 may be useful.