1. (2 points) Section 2.5, Problem 2

2. (2 points) Section 2.5, Problem 11 (no proofs necessary, just give the examples)

3. Let $n$ be a positive integer and $A$ be an $n \times n$ matrix of real numbers. If we write $A = (a_{ij})$, let the transpose be defined by $A^t = (a_{ji})$. Now, for two $n \times n$ matrices of real numbers, prove
   (a) (1 point) $(A + B)^t = A^t + B^t$
   (b) (1 point) $(A \cdot B)^t = B^t \cdot A^t$

4. (2 points) Section 4.1, Problem 14

5. (1 point) Section 4.1, Problem 19

6. (1 point) Section 4.1, Problem 26