1. (2 points) Section 1.4, Problems 2(b), 2(c), 2(e), and 2(f). (You may use any method you like to solve the systems. Just make sure that you provide all details and that your answer is correct.)

2. (1 point) Section 1.4, Problems 3(c), and 3(d).

3. (2 points) Section 1.4, Problem 12.

4. (1 point) Section 1.5, Problem 1. (Just say true or false, no further explanation necessary.)

5. (1 point) Section 1.5, Problem 3.

6. (1 point) Can 8 vectors in $\mathbb{R}^7$ be linearly independent? Justify your answer with an argument about solutions of homogeneous systems of linear equations.

7. (1 point) Section 1.6, Problem 7.

8. (1 point) Section 1.6, Problem 9.