You have 20 minutes to complete this quiz. To receive full credit, you must justify your answers.

Name : _____

1. (5 points) Solve the system of linear equations.

$$2x_1 + x_2 = \frac{1}{2}$$

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2. (5 points) Determine the values of C for which the following system of linear equations has one solution, no solutions, and infinitely many solutions.

$$x_1 + Cx_2 = 1$$

$$2x_1 + 6x_2 = 2$$