

**EGG 102 – Introduction to Engineering Design (Spring 2002)**  
**Class Exercise #2: Writing Problem Statements**

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**Objectives:**

- Identify the need, criteria for success, and statement of a design problem
- Write a clear and unambiguous Problem Statement for a design problem

**Exercise:**

**A. GROUP OF TWO (3 minutes):** Review the mouse trap example and identify where the “need” was clearly stated. Also, identify what criteria for success was established.

**B. INDIVIDUALLY (10 minutes) write a problem statement for these design needs:**

1. A system for minimizing handling of heads of lettuce from the field to the market.

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2. A simple device that will let you get gasoline without ever leaving your car.

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3. An alert system that will warn Southern Nevada citizens of high levels of radiation in the atmosphere.

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**C. GROUPS OF TWO (10 minutes): Form a consensus problem statement:**

4. A system for minimizing handling of heads of lettuce from the field to the market.

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5. A simple device that will let you get gasoline without ever leaving your car.

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6. An alert system that will alert Southern Nevada citizens of high levels of radiation in the atmosphere.

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