1. Compress the function \( f(a,b,c) = \Sigma m(1,2,3,7) \) into a 2-variable map with \( b \) as the map-entered variable.

2. Compress the function \( f(a,b,c) = \Sigma m(1,2,3,7) \) into a 2-variable map with \( a \) as the map-entered variable.

3. Compress the function \( f(a,b,c) = \Sigma m(1,2,3,7) \) into a 2-variable map with \( c \) as the map-entered variable.

4. Find minimum SOP cover from the function in problem 1. Examine the entered-variable maps in problems 1, 2, and 3 and see if you can find minimum cover from these maps (not required but strongly suggested).

5. Compress the function \( f(a,b,c,d) = \Sigma m(0,1,2,3,5,8,12,13,14) \) into a 3-variable map with \( a \) as the map-entered variable.

6. Compress the function \( f(a,b,c,d) = \Sigma m(0,1,2,3,5,8,12,13,14) \) into a 3-variable map with \( d \) as the map-entered variable.

7. Compress the function \( f(a,b,c,d) = \Sigma m(0,1,2,3,5,8,12,13,14) \) into a 2-variable map with \( a \) and \( c \) as the map-entered variables.

8. Find minimum SOP cover from the function in problem 5. Examine the entered-variable maps in problems 5, 6, and 7 and see if you can find minimum cover from these maps (not required, but strongly suggested).

- **Staple this assignment sheet** to your solutions, which are to be done in accordance with the school of engineering homework guidelines posted on the course web page.