1. Consider the following production function $Q = 5KL^{0.5} - L$, and assume that capital is fixed at two units. At what point does $MP_L$ reach zero?

2. Suppose inputs are only substitutable at two units of labor for every one unit of capital. What would be the equation for the production function? What is the average and marginal product of labor in this case?

3. True or false, explain your answer. “Marginal products in the Cobb-Douglas function cannot be negative.”
4. Perloff, third edition: question 19 page 180
