

Suppose a Cobb-Douglas Production Function is given by following

$$Y = L K$$

where L is units of labor, K is units of capital, Y is total units that can be produced with this labor and capital combination. Suppose to each unit of labor costs \$20 and each unit of capital costs \$30, Further suppose a total of \$1500 is available to be invested in labor and capital. How many units of labor and capital should be purchased to maximize production in budgetary constraint.