## EX 023 Utility Maximization with a Cobb-Douglas Utility Function

She has income of \$1,000. Goods(X )is \$8 and Goods(Y) priced at \$10. How many of each X, Y should she purchase if her utility is characterized by the following function? [X:Quantity of Goods(X), Y:Quantity of Goods(Y)]  $U = X^{0.8}Y^{0.2}$