Gluth Company makes three products in a single facility. These products have the following unit product costs:



The mixing machines are potentially the constraint in the production facility. A total of 23,200 minutes are available per month on these machines.

Direct labor is a variable cost in this company.

Required:

a. How many minutes of mixing machine time would be required to satisfy demand for all four products?

b. How much of each product should be produced to maximize net operating income? (Round off to the nearest whole unit.)

c. Up to how much should the company be willing to pay for one additional hour of mixing machine time if the company has made the best use of the existing mixing machine capacity? (Round off to the nearest whole cent.)