20. At a Northview dance, the cost of a ticket for Northview students is $5 and the cost of a ticket for non-Northview students is $7. The dance was a success and 300 people attended. A total of $1724 was made by selling dance tickets. The situation can be described by this linear system:

$$x + y = 300$$
$$5x + 7y = 1724$$

a) What does each variable represent?

b) Solve the system of equations using either the substitution method or the elimination method.

c) How many tickets were sold to Northview students?

d) How many tickets were sold to non-Northview students?