5. A fruit grower raises two crops, which are shipped to three outlets.

The number of units of product $i$ that is shipped to outlet $j$ is represented by $b_{i j}$ in the matrix $B=\left[\begin{array}{ccc}100 & 75 & 75 \\ 125 & 150 & 100\end{array}\right]$

The profit of one unit of product $i$ is represented by $a_{1 i}$ in the matrix $A=\left[\begin{array}{ll}\$ 3.75 & \$ 7.00\end{array}\right]$

Does the matrix multiplication BA make sense?
a) yes and I have a good reason why
b) yes but I am unsure of why
c) no but I am unsure of why not
d) no and I have a good reason of why not
6. A fruit grower raises two crops, which are shipped to three outlets.

The number of units of product $i$ that is shipped to outlet $j$ is represented by $b_{i j}$ in the matrix $B=\left[\begin{array}{ccc}100 & 75 & 75 \\ 125 & 150 & 100\end{array}\right]$

The profit of one unit of product $i$ is represented by $a_{1 i}$ in the matrix $A=\left[\begin{array}{ll}\$ 3.75 & \$ 7.00\end{array}\right]$

Does the matrix multiplication $A B$ make sense?
a) $A B$ is not defined
b) $A B$ has just 1 entry (i.e. a number)
c) $A B$ has 2 entries
d) One entry in AB looks like $3.75 \times 100+3.75 \times 125$
e) $A B$ is defined but none of the above are true

Solutions
5. d)
6. e)

