$$\vec{F} = q[\vec{A} + \vec{B}]\gamma + \frac{q\beta}{c^2}[\vec{v} \times (\vec{C} + \vec{D})]$$

After a complicated calculation, you come up with the above equation for the force on a charged particle (charge q) moving with velocity $\vec{v}$. Identify the electric and magnetic Fields.

a) $\vec{E} = q[\vec{A} + \vec{B}]\gamma$
$\vec{B} = q\frac{\beta}{c^2}(\vec{C} + \vec{D})$

b) $\vec{E} = [\vec{A} + \vec{B}]\gamma$
$\vec{B} = \frac{\beta}{c^2}(\vec{C} + \vec{D})$

c) $\vec{E} = [\vec{A} + \vec{B}]\gamma$
$\vec{B} = \frac{\beta}{c^2}[\vec{v} \times (\vec{C} + \vec{D})]$

d) $\vec{E} = [\vec{A} + \vec{B}]$
$\vec{B} = (\vec{C} + \vec{D})$

In a reference frame where the line of charge is moving with speed V to the left, at a distance r from the line, which are true:

a) $\vec{E} = 0$ $\vec{B} = 0$

b) $\vec{E} = 0$ $\vec{B} \neq 0$

c) $\vec{E} \neq 0$ $\vec{B} = 0$

d) $\vec{E} \neq 0$ $\vec{B} \neq 0$