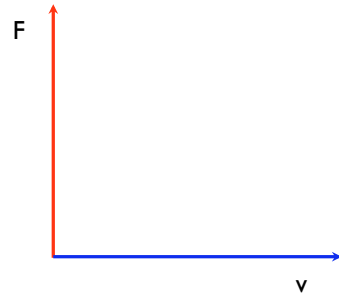


Problem 19.3a

A POSITIVE charge moving with velocity ' v ' feels a force in the direction shown due to a magnetic field. In what direction must the magnetic field be?



1.)

Problem 19.3b

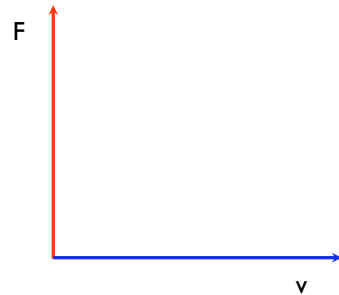
Using the right-hand rule and think "in what direction must I curl my fingers, assuming they begin in the direction of " v ," so that the thumb points in the direction of " F ?" Using the right-hand rule, the direction of the B-field in this case must be to the right in the $+i$ direction.



3.)

Problem 19.3a

Using the right-hand rule and think "in what direction must I curl my fingers, assuming they begin in the direction of " v ," so that the thumb points in the direction of " F ?" Using the right-hand rule, the direction of the B-field in this case must be into the page in the $-k$ direction.



2.)

Problem 19.3c

Using the right-hand rule and think "in what direction must I curl my fingers, assuming they begin in the direction of " v ," so that the thumb points in the direction of " F ?" Using the right-hand rule, the direction of the B-field in this case must be downward in the $-j$ direction.



4.)