a) v is $\longrightarrow$

F_B is $\uparrow$ (on _negative_ charge)

By RHR #1: palm is down (for F_B on _positive_ q

thumb is right

fingers (B) must be | Out $\odot$ |

b) $q = -1.6 \times 10^{-19}$ C
    $v = 2.0 \times 10^7$ m/s
    $B = 6.0 \times 10^{-4}$ T

$F_B = q \cdot v \cdot B$
$= (1.6 \times 10^{-19} C)(2.0 \times 10^7 m/s)(6.0 \times 10^{-4} T)$

| $F_B = 1.9 \times 10^{-15}$ N |

c) $m = 9.11 \times 10^{-31}$ kg
    $v = 2.0 \times 10^7$ m/s

$F_B = F_c = \dfrac{m \cdot v^2}{r}$

$(1.9 \times 10^{-15} N) = \dfrac{(9.11 \times 10^{-31} kg) \cdot (2 \times 10^7 m/s)^2}{r}$

| $r = .19$ m |