r1B = 1.3m

r2B = .4m

r3B = √(.42)+(.52) = .64m

Q1=3.6nC, Q2=4.7nC, Q3=-4.5nC

𝑉B = 𝑘(𝑄1/𝑟1B + 𝑄2/𝑟2B + 𝑄3/𝑟3B)

VB = 9 x 109 (3.6 x 10-9/1.3m + 4.7nC x 10-9/.4m + -4.5 x 10-9/.64m)

VB = 67.39V

V = W/Q

W = QV = (3.9 × 10−4) 67.39𝑉 = 0.0263V