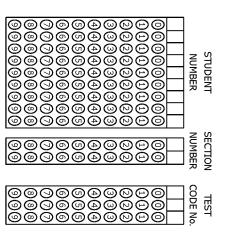
NAME _ STUDENT No. _____ SECTION No. _



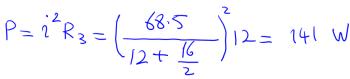
Q1. In the circuit, $R_1 = R_2 = 16.0 \Omega$, $R_3 = 12.0 \Omega$, and $\mathscr{E} = 68.5 V$, determine the power dissipated by R_3 in the unit W.

A) 141 B) 71.8 $i = \frac{\mathcal{E}}{R_3 + \frac{R_1 R_2}{Q_1 + R_2}};$

C) 29.1

D) 493

E) 352



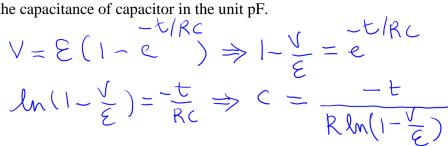
Q2. A 32.7 k Ω resistor and a capacitor are connected in series and a 13.6 V potential difference is suddenly applied across them. The potential difference across the capacitor rises to 6.32 V in 4.28 µs. Find the capacitance of capacitor in the unit pF.

A) 142

B) 171 C) 163

D) 209

E) 111



23 (A) (B) (C) (D) (E)

48 (A) (B) (C) (D) (E)

73 (A) (B) (C) (D) (E)

98 (A) (B) (C) (D) (E)

123 (A) (B) (C) (D) (E)

24 (A) (B) (C) (D) (E)

49 (A) (B) (C) (D) (E)

74 (A) (B) (C) (D) (E)

99 A B C D E

124 (A) (B) (C) (D) (E)

25 (A) (B) (C) (D) (E)

50 (A) (B) (C) (D) (E)

75 (A) (B) (C) (D) (E)

100 A B © D E

125 (A) (B) (C) (D) (E)