Use engineering paper. Work only on one side of the paper. Use this sheet as your cover sheet, placed on top of your work and stapled in the top left-hand corner. Number the problems at the top of the page, in the center of the sheet. **Do neat work. Underline your answers. Show how you got your equations. Be sure to show how you got your answers.** Each problem counts 3 points.

Review Questions: Suggested study. Do not turn this in.

1.7 No answers given

1.9 (a) \( q = 10 \) C, (b) \( q = 22.5 \) C, (c) \( q = 30 \) C

1.10 \( q = 120 \) mC

1.17 \( p_3 = 70 \) W

1.18 \( p_1 = -300 \) W, \( p_2 = 100 \) W, \( p_3 = 280 \) W, \( p_4 = -32 \) W, \( p_5 = -48 \) W

1.19 Hint: sum of power = 0; \( I_s = 3 \) A

1.25 cost = 21.6 cents

1.34 (a) \( W = 10 \) kWH, (b) Average Power = 416.7 W

1.38 \( P = 7460 \) W, \( W = 13.48 \times 10^6 \) J