#15 (Total 10 Points)

(1) $\hat{y}_1 = 19,85 + 0,745 * 1 = 20,595$

(2) $y_1 - \hat{y}_1 = 10 - 20,595 = -10,595$

(3) $FC = 19,85 + 0,745 - 11,565 = 9,030$

(4) $FCE = 10 - 9,030 = 0,970$

(5) $Sq_{FCE} = 0,970^2 = 0,9409$

(6) $\vartheta_1 = 19,85 + 0,745 + (0,2 * 0,970) = 20,789$

(7) $b_1 = 0,745 + (0,2 * 0,1 * 0,970) = 0,764$

(8) $sn_1 = -11,565 + [(1 - 0,2) * 0,1 * 0,970] = -11,487$

(9) $s^2 = \frac{20,081}{16-3} = 1,5447$

(10) $s = \sqrt{1,5447} = 1,2429$