

Ch2, qn14, -許傑 - 313707025

$$\begin{aligned} \text{a.}, \widehat{wage} &= -4.88 + 1.80 EDUC = 19.74, \\ 19.74 + 4.88 &= 1.8 EDUC, \\ EDUC &= \frac{19.74+4.88}{1.8} \approx 13.68, \\ \epsilon &= 1.8 \times \frac{13.68}{19.74} \approx 1.8 \times 0.69 \approx 1.25; \end{aligned}$$

$$\text{b.}, \widehat{wage} = 2.46(13.68) - 10.76 = 22.87$$

$$\text{se}(\epsilon) = \frac{13.68}{22.87} \times 0.16 \approx 0.598 \times 0.16 \approx 0.096;$$

c.,

$$\text{for cities: } \widehat{wage} = -10.76 + 2.46 \times Yr$$

$$\text{For 12 years: } \widehat{wage} = -10.76 + 2.46 \times 12 = 18.76$$

$$\text{For 16 years: } \widehat{wage} = -10.76 + 2.46 \times 16 = 28.60$$

$$\text{for rural: } \widehat{wage} = -10.76 + 1.8 \times Yr$$

$$\text{For 12 years: } \widehat{wage} = -10.76 + 1.8 \times 12 = 16.72$$

$$\text{For 16 years: } \widehat{wage} = -10.76 + 1.8 \times 16 = 23.92$$