(Year) (Unemp) (Riots)

i	x_i	y_i	$x_i-\bar{x}$	$(x_i-\bar{x})^2$	$y_i-\bar{y}$	$(y_i-\bar{y})^2$	$(x_i-\bar{x})\cdot(y_i-\bar{y})$
1930	8.7	3					
1931	15.9	28					
1932	23.6	21					
1933	24.9	17					
1934	21.7	37					
1935	20.1	30					
1936	16.9	31					
1937	14.3	22					
1938	19.0	2					
1939	17.2	9					
Σ	182.3	200	SST_x =		SST_y =		.
Σ/n	$\bar{x} \approx 18.2$	$\bar{y} = 20.0$					
Σ/(n-1)				= var(x)		= var(y)	= cov(x,y)
				s_x =		s_y =	

Slope: $\widehat{\beta_1} = \frac{cov(x,y)}{var(x)}$

Intercept: $\widehat{\beta_0} = \bar{y} - \widehat{\beta_1}\bar{x}$

i	y_i	$\widehat{y_i} = \widehat{\beta_0} + \widehat{\beta_1}x_i$	$\widehat{u_i} = y_i - \widehat{y_i}$	$\widehat{u_i}^2 = (y_i - \widehat{y_i})^2$	$(x_i-\bar{x})\cdot\widehat{u_i}$
1930	3				
1931	28				
1932	21				
1933	17				
1934	37				
1935	30				
1936	31				
1937	22				
1938	2				
1939	9				
Σ	200			SSR =	
Σ/(n-2)				$\widehat{\sigma^2}$ =	

$\hat{\sigma}$ =

Standard error of slope: $se(\widehat{\beta_1}) = \sqrt{\frac{\widehat{\sigma^2}}{SST_x}} = \frac{\hat{\sigma}}{\sqrt{n-1}\cdot s_x} =$

Standard error of intercept: $se(\widehat{\beta_0}) = \sqrt{\frac{\widehat{\sigma^2}}{SST_x}} \cdot \frac{\sum x_i^2}{n} =$