

$$p = \text{sum of } XY, d = \text{sum of } X^2, w = \text{sum of } Y^2$$

$$r = \frac{p - n(\bar{x})(\bar{y})}{\sqrt{(d - n(\bar{x})^2)(w - n(\bar{y})^2)}}$$

$$r = \frac{15282 - 5(35.2)(86)}{\sqrt{(7016 - 5(35.2)^2)(37020 - 5(86)^2)}}$$

$$r = \frac{146}{\sqrt{(820)(40)}}$$

$$r = \frac{146}{181.1960264}$$

$$r = 0.805757183$$

$$t = r \cdot \sqrt{\frac{n-2}{1-r^2}}$$

$$t = .81 \cdot \sqrt{\frac{5-2}{1-.81^2}}$$

$$t = .81 \cdot \sqrt{8.723466124}$$

$$t = .81 \cdot 2.953551443$$

$$t = 2.392376668$$

$$d = \text{sum of } D^2$$

$$\rho = 1 - \frac{6(d)}{n(n^2 - 1)}$$

$$\rho = 1 - \frac{6(2)}{5(5^2 - 1)}$$

$$\rho = 1 - \frac{12}{120}$$

$$\rho = 1 - 0.1$$

$$\rho = 0.9$$