(k) Is A_1 independent of B_1?

How many employees satisfy each of the following conditions?

(l). The person is neither an executive nor a junior executive.

(m). The person is both an executive and a junior executive.

(n). The person is more than 30 years old, and is clerical or custodial.

(o). The person is a salesperson and/or between 21 and 25 years old, inclusive

(p). The person is a craftsman 35 years old or younger.

(q). The person is a craftsman or a salesperson and is between 21 and 30 years old, inclusive.

(r). The person is a clerical or custodial, and is more than 30 years old.

#5 69. Calculate from the information provided below

$n=4$

	X ind	Y dep.	XY	X^2
1	-2	9	-18	-36
2	0	5	5	25
3	-0.5	7	-3.5	-7
4	1	100	100	10,000
sum	-1.5	121	83.5	9,982

a. Compute the sample regression coefficients b_0 and b_1. regression equation

my answers wrong see notepad

see notepad sample 4-6

see p. 4-5 for formula

$b_0 = 40.16$

$b_1 = 34.427$

#5 69.

A. compute b_0:

b_0 $$\frac{b_0 = (\Sigma y)(\Sigma x^2) - (\Sigma x)(\Sigma xy)}{n(\Sigma x^2) - (\Sigma x)^2} =$$

$$\frac{(121)(9,982) - (-1.5)(83.5)}{4(9,982) - (-2.25)} =$$

$$\frac{1,207,822 - (-125.5)}{39,928 - (-2.25)} =$$

$$\frac{1,207,822 + 125.5}{39,928 + 2.25} = \frac{1,207,947.5}{39,930.25} = b_0 = \underline{30.25}$$

---

b_1 $$= \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{n(\Sigma x^2) - (\Sigma x)^2} =$$

$$\frac{4(83.5) - (-1.5)(121)}{4(9,982) - (-2.25)} = \frac{334 - (-181.5)}{39,928 + 2.25} =$$

$$\frac{515.5}{39,930.25} = .013 \; b_1$$

[redacted] b_0

24.427 ✓

*

b_0

~~18.534~~

✓ 40.16

*

*Correct answers