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UAS PROBILITAS

Jawaban :

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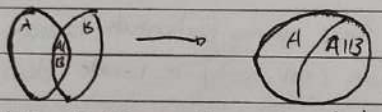
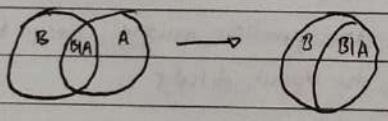
Jawaban

1. Distribusi normal merupakan sebuah fungsi probilitas yang menceritakan distribusi atau penyebaran suatu variable contoh: fakta alam yang terdistibusikan normal banyak di temukan dalam berbagai perhitungan statistika dan permodelan yg berguna.

2. Sebuah P(3 lulus uji) - P(K1 dan K2 dan K3)
- 0.95 0.95 . 0.95 = 0,86
Q. P(2 lolos uji) P(K1 & K2 & K3) + P(K1 & K2 & K3) + P(K1 & K2 & K3)
= (0.95 0,95 0.95) + (0.040 . 0.50 95 + (0.05 0.95 095) . 0.19
≤ P(tidak ada yg lulus uji) . P(K1' & K2' & K3')
= 0.05 0.05 0.05 = 0,000 125
- di simbolkan Pr(A|B) atau pr(B|A) kejadian tak bebas (bersyarat) dapat di lihat melalui diagram ven berikut:



Diatas diagram yg mengatakan probilitas B dgn syarat A telah terjadi. Perhatikan A dgn serat B telah terjadi



3. N = 500
n = N = 165
σ = 12
A = 36 0,072 = 7,2% > 5%
$\frac{n}{N} = \frac{36}{500}$
P(x̄ < 160) = P(z < 2)

$fk = \sqrt{\frac{n-n}{n-1}} = \sqrt{\frac{300-30}{600-1}} = \sqrt{\frac{469}{499}} = \sqrt{0,939} = 0,964$

$0.\frac{\bar{x}}{\sqrt{n}} \times fk = \frac{12}{\sqrt{36}} \times 0,964 = 2 \times 0,964 = 1928$

$= \frac{160-165}{1928} = -2.59$

P(x̄ < 160) P(26-2,59) = 0,5 - 0,4952 = 0.0048

No.
Date:

9. A.

25	40
27	50
30	95
23	92
$x = 105$	$x = 177$

dik : A : 5% = 0,085

B : 5% = 0,05

$$\frac{b = n\Sigma xy - \Sigma x \Sigma y}{\Sigma x^2 - (\Sigma x)} = \frac{4(9666) - (105)(177)}{4(2781) - (11023)}$$

$$= \frac{18664 - 18585}{11132 - 11025} = \frac{75}{107} = 0,783$$

$$\frac{A = \Sigma y - b \Sigma x}{n}$$

$$= \frac{177 - 0,73(105)}{9} = \frac{177 - 76,65}{9} = \frac{100,35}{9} = 20,06$$

B. $r = n\Sigma xy = \Sigma x \Sigma y$

$$[n(\Sigma x^2) - (\Sigma x)^2]^{1/2} - [n(\Sigma y^2) - (\Sigma y)^2]^{1/2}$$

$$= \frac{4(9666) - (105)(177)}{[4(2783) - (11025)]^{1/2}\,[4(7879)\,31329)]^{1/2}}$$

$$= \frac{18669 - 18585}{[(07)^{1/2}(1867)^{1/2}} = \frac{79}{\sqrt{11.39}} = 0,5589$$

Koefisien determasi $r2 = 0,5589 = 55,89\%$

C. Standart Estimasi

$$SE = \sqrt{\frac{(\Sigma)^2 - A\,a.\Sigma y - b.\Sigma xy)}{n-2}}$$

$$= \sqrt{\frac{7873 - (25.00)(1777) - (10,75)(9666)}{9-2}}$$

$$= \sqrt{\frac{7873 - (4439,916) - \Sigma 900,00)}{2}} = \sqrt{\frac{53,66}{2}}\sqrt{\frac{6}{16,83}}$$

Date:

B. ~~Distribusi~~

D. Ho B 0,05

A Hab x 0,05

- Uji hipotesis 2 arah

- Tingkat signifikan

α = 0,05 / 2 = 0,025

- Wilayah kritis

Db : n - 2 - 4 - 2 = 2

t : (0,023 / 2) : ± 4,303

Nilai Hitung

Sb : $\frac{Se}{\sqrt{\Sigma x2 - \frac{(\Sigma x)^2}{n}}}$

$= \frac{4,102}{\sqrt{2783 - \frac{(105)^2}{4}}}$

$= \frac{4,102}{\sqrt{2783 - \frac{11035}{4}}}$

$= \frac{4,102}{\sqrt{2783 - 2256,78}}$ $= \frac{4,102}{\sqrt{27}}$ $= \frac{4,10^2}{5,13}$ = 0,79

t = bB / sb

$= \frac{0,73 \quad 0,05}{0,75}$ = 0,85 //

55. n = 15% x = 6 : P = 2/5 1/4 = 3/3

$P(r:n) = \frac{n!}{(n-x)!\,x!} \cdot p^x \cdot q^{n-x}$

$P(6.15) = \frac{15!}{(15-6)!\,6!} \cdot \left(\frac{2}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^9 = 0,207$