Statistics

Lecture 13

Feb 19-8:47 AM
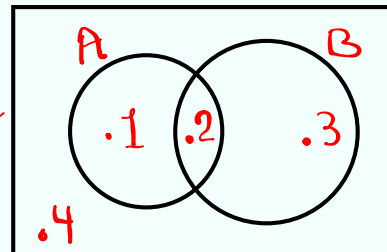
Given $P(A) = .3$, $P(B) = .5$, $P(A \text{ and } B) = .2$

1) Construct Venn Diagram.

$.3 - .2 = .1$
$.5 - .2 = .3$

Total = 1 ✓

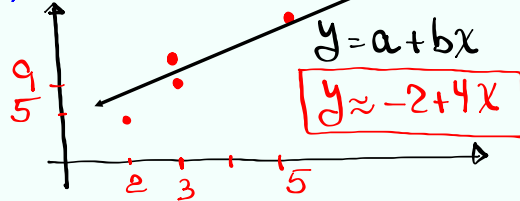A .1 | .2 | .3 B

.4

2) $P(A \text{ only}) = \boxed{.1}$

3) $P(A \text{ only or } B \text{ only})$
$= .1 + .3 = \boxed{.4}$

Oct 20-10:34 AM

Consider the chart below

x	y
2	5
3	9
3	10
5	16

1) Scatter Plot

$y = a + bx$

$y \approx -2 + 4x$

2) Equation of the regression line. $x \to L1$, $y \to L2$

use LinReg(a+bx) with L1 & L2.

$a = -1.632$, $b = 3.579$

3) find r & r^2

$r^2 = .981 \approx 98\%$

$r = .991$

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Complete the chart below

$\to \frac{f}{n} = \frac{f}{30}$

class limits	Class MP	class F	Rel. F
60 – 72	66	8	.267
73 – 85	79	12	.400
86 – 98	92	7	.233
99 – 111	105	3	.100

1-Var Stats

L1 & L2

use class MP & class F to find

$\bar{x} = 81.1\overline{6}$ $S = 12.348$ $S^2 = \frac{26533}{174}$ $n = 30$

$\approx \boxed{81}$ $\approx \boxed{12}$

VARS

5: Statistics

3: S_x

x^2

Math   1: ▶Frac

Enter

Oct 20-10:45 AM