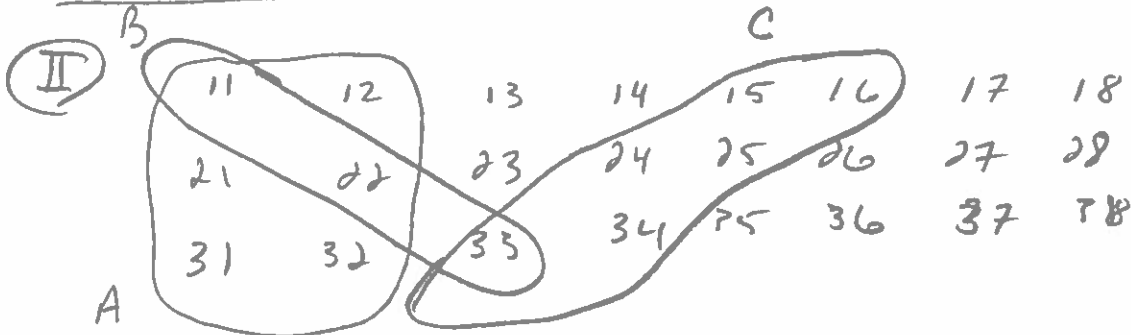


① Form #1

- | | |
|------|-------|
| 1. B | 6. B |
| 2. C | 7. D |
| 3. B | 8. B |
| 4. A | 9. E |
| 5. C | 10. C |

Form #2:

- | | |
|------|-------|
| 1. A | 6. E |
| 2. A | 7. C |
| 3. C | 8. A |
| 4. B | 9. D |
| 5. C | 10. B |



① $P(A) = \frac{6}{24} = \frac{1}{4}$ $P(B) = \frac{3}{24} = \frac{1}{8}$ $P(C) = \frac{6}{24} = \frac{1}{4}$

② $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$
 $= \frac{6}{24} + \frac{3}{24} - \frac{2}{24}$
 $= \frac{7}{24}$

③ $P(B \text{ and } C) \stackrel{?}{=} P(B) \cdot P(C)$
 $\frac{1}{24} \stackrel{?}{=} \left(\frac{1}{8}\right) \cdot \left(\frac{1}{4}\right)$
 $\frac{1}{24} \stackrel{?}{=} \frac{1}{32}$

SINCE THESE DO NOT EQUAL

B & C ARE NOT INDEPENDENT

$$= .81$$

$$P(F) = 1 - P(F^c)$$

$= 1.40$

- 60 -



15

$$P(D \text{ and } E) \stackrel{?}{=} P(D) \cdot P(E)$$

11
28

$$\underbrace{(.35) \cdot (.80)}_{.28}$$

↳ NOTE:

NOTE:
 $P(D \text{ or } E) = P(D) + P(E) - P(D \text{ and } E)$

$$\Rightarrow .87 = .35 + .80 - x$$

$\Rightarrow x = .28$

SINCE THESE ARE EQUAL

D and E ARE INDEPENDENT

IV

	J	K	L	M	TOTAL
Q	.08	.02	.16	.14	.40
R	.12	.08	.24	.16	.60
TOTAL	.20	.10	.40	.30	1.00

NOTE!

NOTE: we are given

we are given
 J and Q are indep $\Rightarrow P(J \text{ and } Q) = P(J) \cdot P(Q)$
 $= (.20) \cdot (.40)$
 $= .08$

16.

$$P(Q \text{ and } L) = .16$$

17. $P(R \cup K) = P(R) + P(K) - P(R \cap K)$

$$= .60 + .10 - .08$$

$$= \boxed{.62}$$

18

$$P(M \text{ and } R) \stackrel{?}{=} P(M) \cdot P(R)$$

11
216

$$\underbrace{(.30) \cdot (.60)}_{.18}$$

SINCE THESE DO NOT EQUAL

M and R are NOT INDEP.