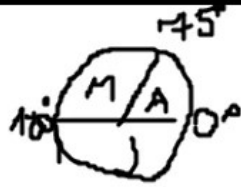


1. üzlet

408



2. üzlet

432



3. üzlet

216

a)

	1.	2.	3.	Σ
AJ	119	90	72	281
MS	119	126	117	362
JA	170	216	27	<u>413</u>
Σ	408	432	216	

\rightarrow J. A ✓

$$1. \text{ üzlet: } A: \frac{105}{360} \cdot 408 = 119$$

$$\frac{180}{360} \cdot 408 = 170$$

$$M: \frac{105}{360} \cdot 408 = 119$$

$$2. \text{ üzlet: } A: \frac{75}{360} \cdot 432 = 90$$

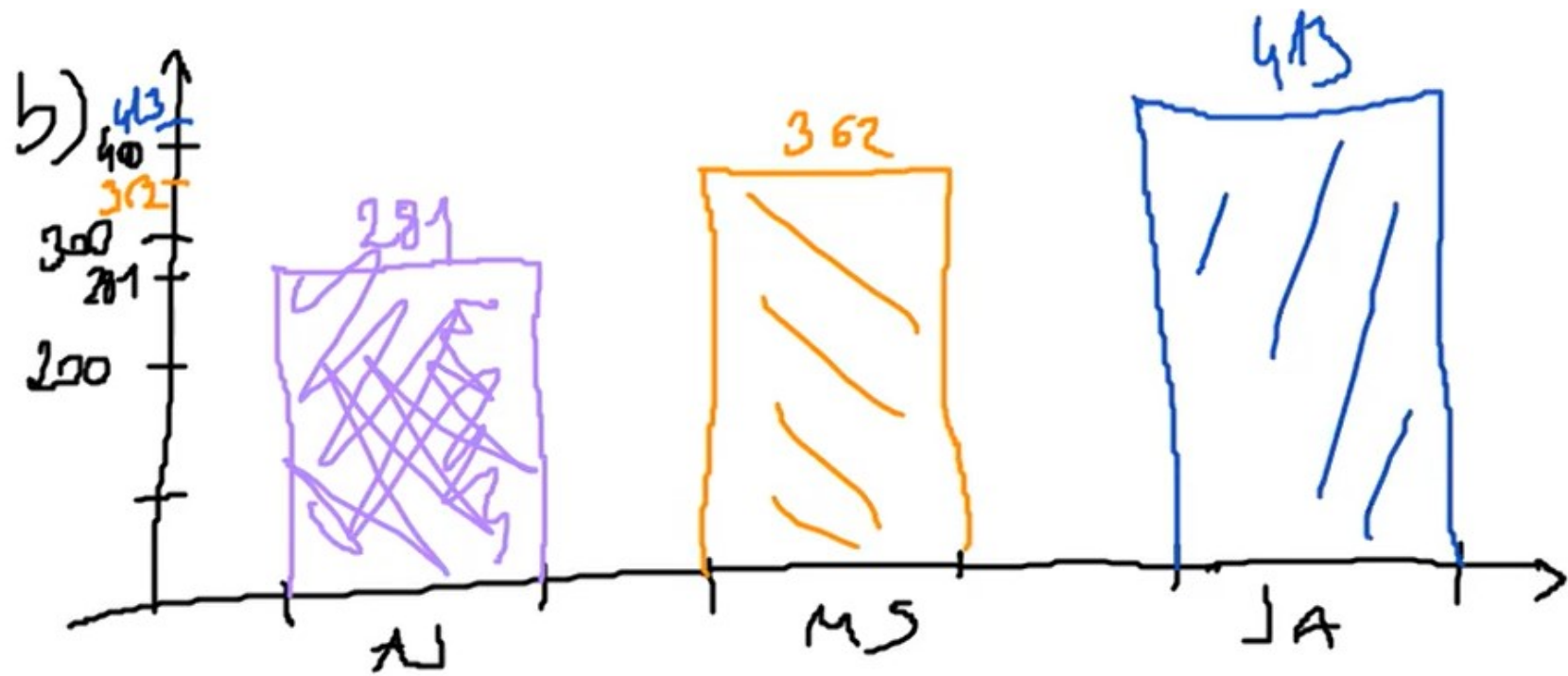
$$M: \frac{126}{360} \cdot 432 = 126$$

$$J: \frac{180}{360} \cdot 432 = 216$$

$$3. \text{ üzlet: } A: \frac{45}{360} \cdot 216 = 27$$

$$M: \frac{117}{360} \cdot 216 = 117$$

$$J: \frac{45}{360} \cdot 216 = 27$$



2) a)

$$\begin{array}{r} \text{find} \\ 0 \ 1 \ 2 \ \dots \ 5 \\ 0 \ 1 \ 2 \ 3 \ 4 \ 5 \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$$

$$(103 + 58 + 15 + 3 + 3 + 0) \cdot 1 + 2 \cdot (6 + 11 + 3 + 3 \cdot 1) + 3 \cdot 16 + 4 \cdot 9 + 5 \cdot 4 = 442$$

V: 442 find...

b) 0 laing: $58 + 11 + 4 + 1 + 1 = 74$

1 laing: $54 + 15 + 3 + 2 + 2 = 75$

$$\begin{array}{r} 2 \\ \hline 3 \\ 4 \\ 5 \end{array}$$

$$\begin{array}{r} = 78 \\ = 14 \\ = 12 \\ = 2 \end{array}$$

V: 2 on laing akribos laing stin.

1 cs / 2.5 wj	4	5	6	7	8	9	10
g _{ij} w _{ij}	21	8	5	4	2	0	0

$$\sum_{ij} g_{ij} = 21 + 8 + 5 + 4 + 2 = \boxed{40}$$

$$21 \cdot 4 + 8 \cdot 5 + 5 \cdot 6 + 4 \cdot 7 + 2 \cdot 8 = \boxed{198}$$

l

		f					
		0	1	2	3	4	5
0		x	x	x	x	5	0
1		x	x	x	4	1	1
2		x	x	3	2	2	2
3		x	3	1	1	0	1
4		1	3	1	1	1	0
5		1	0	1	0	0	0

V:

1	2	3
4	5	6
7	8	9

3 lyuk

megfelelő: $3 \cdot 2 \cdot 1 = 6$



b)

1	X	3
4	X	6
X	8	X

$$P_A = \frac{\text{kedvezés}}{\text{összes}} = \frac{4}{84} \approx 0,048 \approx 4,8\%$$

$$\binom{4}{3} = 4 \quad 8,3\%$$

c) $\binom{9}{3} = 84$

$$P_2 = \frac{7}{84} \approx 0,083$$

13 = 1+3+9 = 1+4+8 = 1+5+7 = 2+3+8 = 2+4+7 = 2+5+6
 7 lehetőség = 3+4+6

$$A = \{0; 1; 2; 3; 4; 5\}$$

$$a) \binom{6}{3} = 20 \quad - 2p$$

b) 0 v. 5-re megzárható

$$5! = \overline{5} \cdot \overline{4} \cdot \overline{3} \cdot \overline{2} \cdot \overline{1} \quad \frac{0}{\quad} \quad / \quad \overline{4} \cdot \overline{4} \cdot \overline{3} \cdot \overline{2} \cdot \overline{1} \quad \frac{5}{\quad}$$

$$5! + 4 \cdot 4! = 216$$

$$c) 5 \cdot 6^5 = 38880 \rightarrow \text{összes lehetőség}$$

$$A' = \{0; 2; 3; 4; 5\}$$

$$A' \text{ összes 0 száma: } 4 \cdot 5^5 = 12500$$

$$M_0: 38880 - 12500 = \underline{\underline{26380}}$$

7 pénzérmé $\rightarrow F$ \downarrow \rightarrow i: legkevesebb száma
 f : legkevesebb száma

$$a) P = \frac{\text{kedves}}{\text{összes}} = \frac{64}{128} = \frac{1}{2}$$

$$2^7 = 128$$

F: 4
5
6
7

$$\binom{7}{4} + \binom{7}{5} + \binom{7}{6} + \binom{7}{7} = 35 + 21 + 7 + 1 = 64$$

$$\mathbb{P}(\|X - 11\| \geq 3) = \textcircled{*}$$

$$\begin{array}{l} 6F \\ 7F \end{array} \quad \begin{array}{l} 11' \\ 0' \end{array}$$

$$\begin{pmatrix} 7 \\ 1 \end{pmatrix} + \begin{pmatrix} 7 \\ 0 \end{pmatrix} = 7 + 1 = 8$$

$$\textcircled{*} = \frac{8}{128} = \frac{1}{16} = 0,0625$$

a) Ernte: e

$$e = 6 + m$$

$$e = (6 - m) \cdot m$$

$$6 + m = (6 - m) \cdot m$$

$$m^2 - 5m + 6 = 0$$

$$x_{1,2} = \frac{5 \pm \sqrt{(-5)^2 - 4 \cdot 1 \cdot 6}}{2 \cdot 1} = \begin{cases} m_1 = 2 \\ m_2 = 3 \end{cases}$$

$$\Rightarrow e_1 = 8 \quad e_2 = 9$$

Ell, V :

$$b) P(\text{eine hibais}) = 0,03 = p \quad P(j^0) = 0,97 = 1-p$$

$$P(\text{e hibislet silenos n-töbl}) = \binom{n}{e} p^e \cdot (1-p)^{n-e}$$

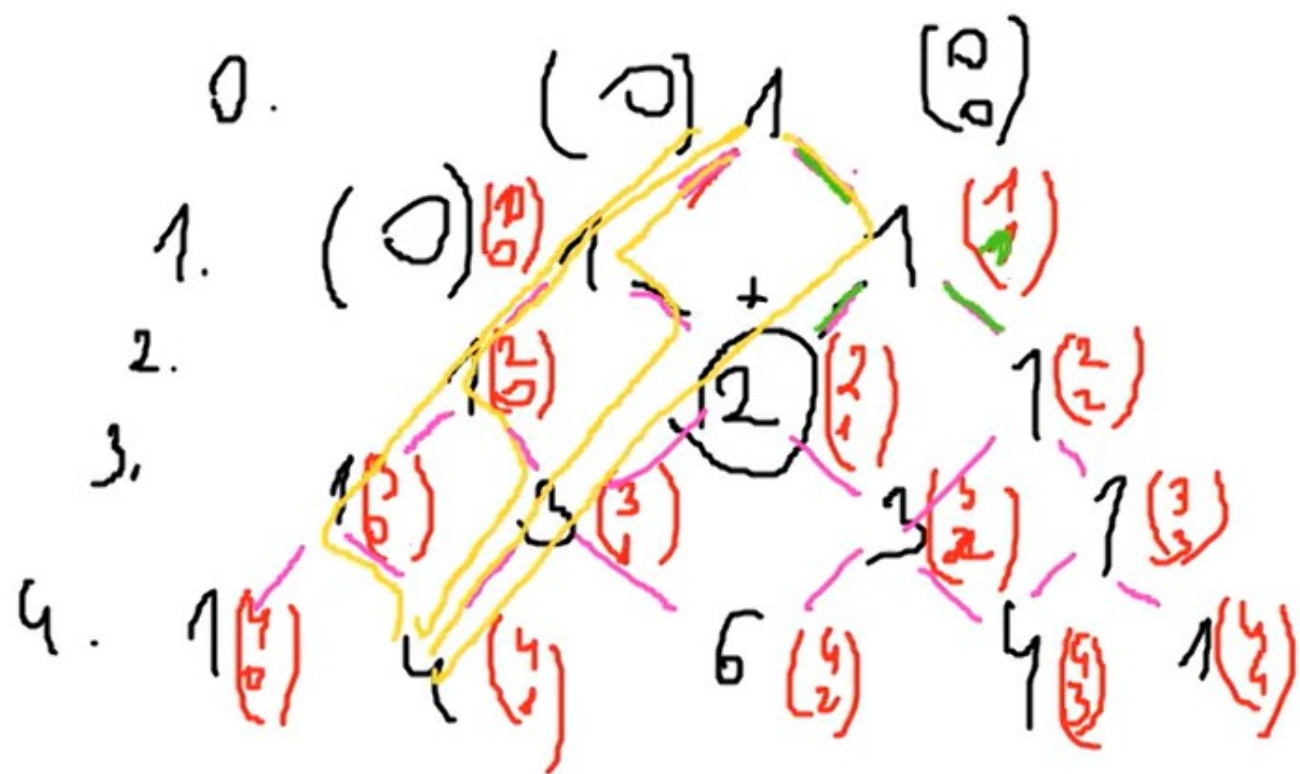
$$P(0 \text{ hibais}) = \binom{80}{0} \cdot 0,03^0 \cdot 0,97^{80} \approx 0,087$$

$$P(1 \text{ hibais}) = \binom{80}{1} \cdot 0,03^1 \cdot 0,97^{79} \approx 0,216$$

$$P(2 \text{ hibais}) = \binom{80}{2} \cdot 0,03^2 \cdot 0,97^{78} \approx 0,264$$

$$P(\text{max 2 hibais}) \approx 0,087 + 0,216 + 0,264 = \underline{\underline{0,567}}$$

✓:



Σειράς
Συνόλων