

Problem 4 (1)

$D_1$	$D_2$	$D_3$	$D_4$	$D_5$
3	0	0	0	0
0	3	0	0	0
0	0	3	0	0
1	1	1	0	0
0	1	1	1	0
0	0	1	1	1
1	1	0	0	1
1	1	0	1	0
1	0	0	1	1
1	0			

$$\begin{pmatrix} 5 & 4 \\ 4 \end{pmatrix} =$$

Total outcome =  $6^n = 6^5$

$$\begin{aligned} 1+1 &= 2 \\ 2+0 &= 2 \end{aligned}$$

$$3 \rightarrow 3$$

0	0	0	0	0	1
0	0	0	0	1	2
0	0	0	1	0	3
0	0	0	1	1	4
0	0	1	0	0	5
0	0	1	0	1	6
0	0	1	1	0	7
0	0	1	1	1	8
0	1	0	0	0	9
0	1	0	0	1	10
0	1	0	1	0	11
0	1	0	1	1	12
0	1	1	0	0	13
0	1	1	0	1	14
0	1	1	1	0	15
0	1	1	1	1	16
1	0	0	0	0	17
1	0	0	0	1	18
1	0	0	1	0	19
1	0	0	1	1	20
1	0	1	0	0	21
1	0	1	0	1	22
1	0	1	1	0	23
1	1	0	0	0	24
1	1	0	0	1	25
1	1	0	1	0	26
1	1	0	1	1	27
1	1	1	0	0	28
1	1	1	0	1	29
1	1	1	1	0	30
1	1	1	1	1	31

$$1+1+1$$

$$1+1+1, 1+1, 1$$

$$2, 2+1, 1+2$$

$$3$$

$$2$$

$$-48x+14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$48x-14y-2 = 66$$

$$\begin{aligned} 48x - 48 - 14y - 28 - 2 + 10 &= 0 \\ 48x - 14y - 2 &= 48 + 28 - 10 \end{aligned}$$

1	1	0	0	1	24
1	1	0	1	0	25
1	1	0	1	1	26
1	1	1	0	0	27
1	1	1	0	1	28
1	1	1	1	0	29
1	1	1	1	1	30

$$\begin{aligned} &= 5 + 26 + 25 \\ &= 56 \end{aligned}$$

$$\text{Prob} = \frac{56}{6^5}$$

Problem 4(2)

$$\frac{1}{6} \cdot (1+2+3+4+5+6) \cdot n$$

$$= \frac{21n}{6}$$

$$= \frac{7}{2}n$$

$$= 3.5n$$

$$= 3.5(5)$$

$$= 17.5$$

---