

by Rza Bashirov

DISCRETE MATHEMATICS

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$$\sum_{v \in V} \deg(v) = \sum_{\substack{v \in V \\ v \text{ even}}} \deg(v) + \sum_{\substack{v \in V \\ v \text{ odd}}} \deg(v)$$

$$S = \frac{8^{12} \left[1 - \left(\frac{1}{2}\right)^{20} \right]}{1 - \frac{1}{2}}$$

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$$\begin{aligned} f &= \bar{x}_1 \bar{x}_2 \bar{x}_3 + \bar{x}_1 \bar{x}_2 x_3 + \bar{x}_1 x_2 \bar{x}_3 + \bar{x}_1 x_2 x_3 + x_1 x_2 \bar{x}_3 + x_1 x_2 x_3 \\ &= \bar{x}_1 \bar{x}_2 (\bar{x}_3 + x_3) + \bar{x}_1 x_2 (\bar{x}_3 + x_3) + x_1 x_2 (\bar{x}_3 + x_3) \\ &= (\bar{x}_1 \bar{x}_2 + \bar{x}_1 x_2 + x_1 x_2) (\bar{x}_3 + x_3) \\ &= \bar{x}_1 \bar{x}_2 + \bar{x}_1 x_2 + x_1 x_2 \\ &= \bar{x}_1 (\bar{x}_2 + x_2) + x_1 x_2 \end{aligned}$$

$$a_n = r a_{n-1} + s a_{n-2} + f(n)$$

1								
1	1							
1	2	1						
1	3	3	1					
1	4	6	4	1				
1	5	10	10	5	1			
1	6	15	20	15	6	1		
1	7	21	35	35	21	7	1	
1	8	28	56	70	56	28	8	1

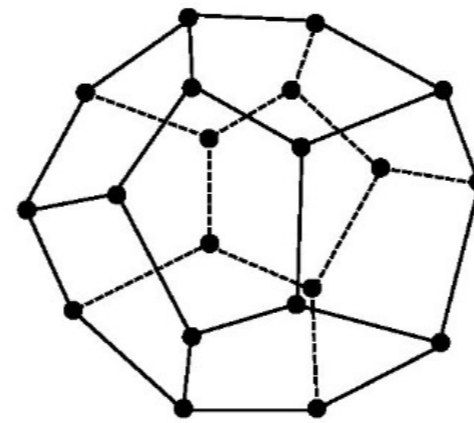
$$a_0 = c_1 + c_2 = 1$$



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Discrete Mathematics



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