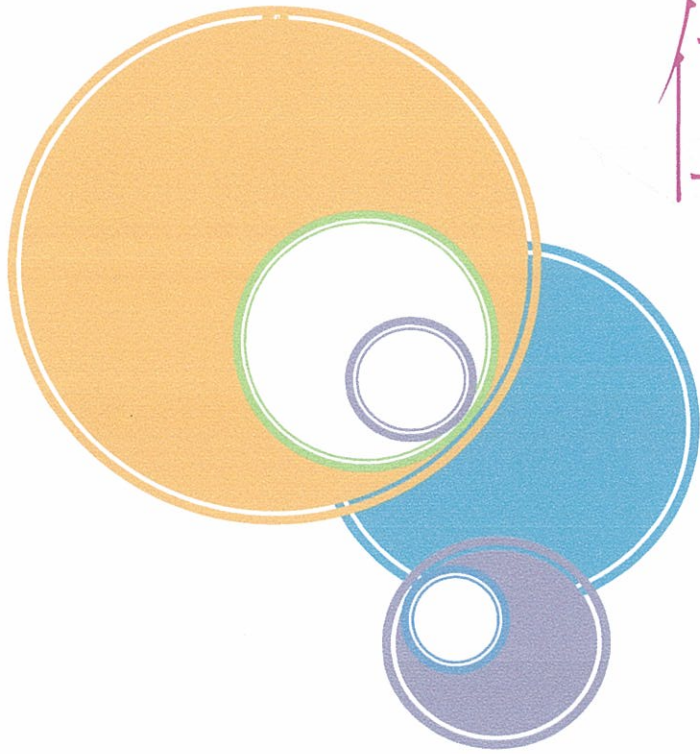


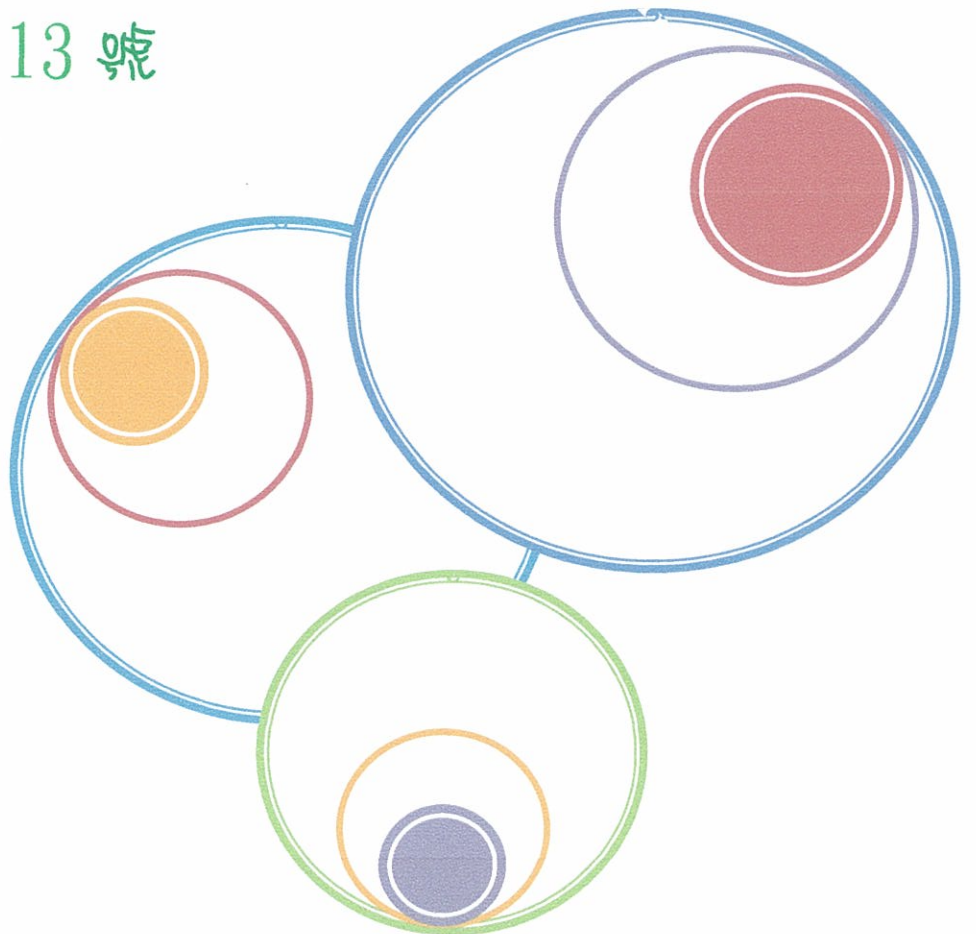
仁愛鐵三角



班級：4年8班

資優班座號：13號

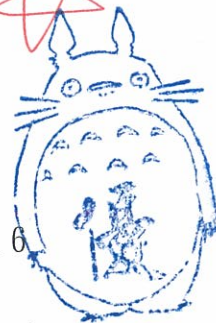
姓名：張宇萱



仁愛鐵三角

4 年級：8 班 姓名：張宇萱

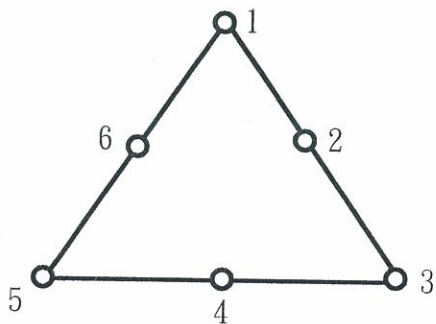
三角形是一種最基本的幾何圖形，而在日常生活中也隨處都可以發現三角形的蹤跡，所以值得我們好好的做一番研究。



【問題一】1★

如下圖所示，在一個正三角形的邊及頂點上共有 6 個點，請問用這 6 個點中的任意三個點，可以畫出多少個三角形？請一一寫出
 例如：(1-2-4)可畫出，(1-2-3)則無法畫出，(2-3-4)與(3-4-2)相同只能算一個

123
132
213
231
321
312



$$6 \times 5 \times 4 = 120$$

$$120 \div 6 = 20$$

$$20 - 3 = 17 \text{ (扣掉 3 條直線)}$$

【問題二】2★

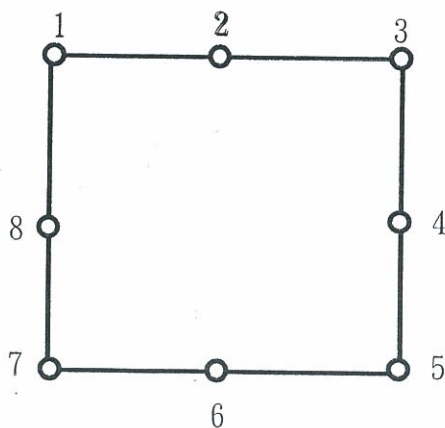
A: 17 個

如下圖所示，在一個正正方形的邊及頂點上共有 8 個點，請問用這 8 個點中的任意三個點，可以畫出多少個三角形？(52) 個。請一一寫出

$$8 \times 7 \times 6 = 336$$

$$336 \div 6 = 56$$

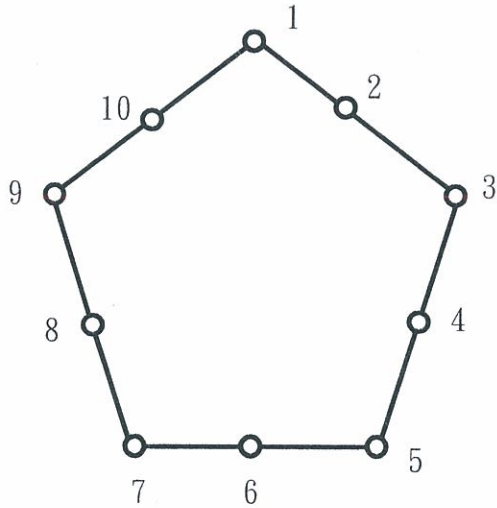
$$56 - 4 = 52$$



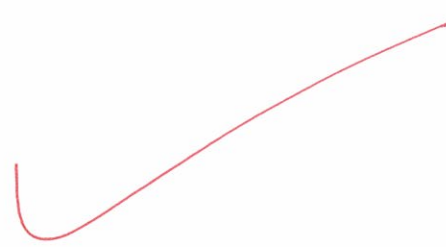
A: 52 個

【問題三】3★

如下圖所示，在一個正六角形的邊及頂點上共有 10 個點，請問用這 10 個點中的任意三個點，可以畫出多少個三角形？(115)個。請一一寫出



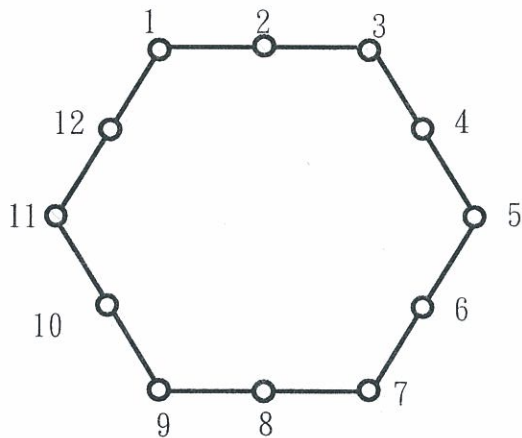
$$\begin{aligned} 10 \times 9 \times 8 &= 720 \\ 720 \div 6 &= 120 \\ 120 - 5 &= 115 \end{aligned}$$



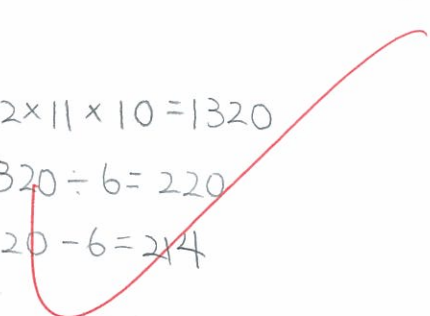
A: 115 個

【問題四】4★

如下圖所示，在一個正六角形的邊及頂點上共有 12 個點，請問用這 12 個點中的任意三個點，可以畫出多少個三角形？(244)個。請寫出計算方式，不用一一寫出。



$$\begin{aligned} 12 \times 11 \times 10 &= 1320 \\ 1320 \div 6 &= 220 \\ 220 - 6 &= 214 \end{aligned}$$

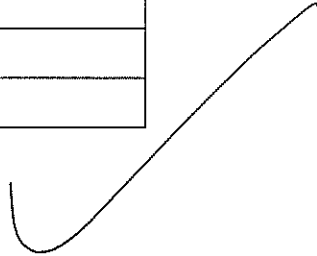


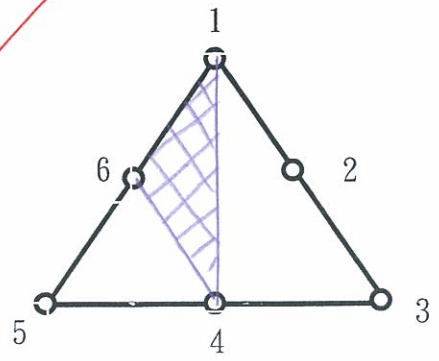
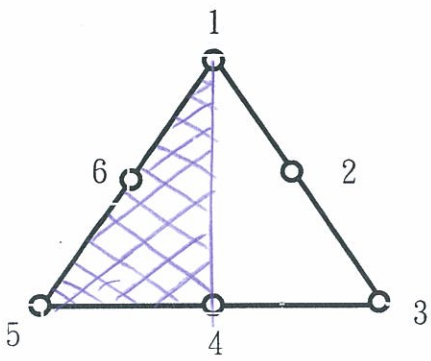
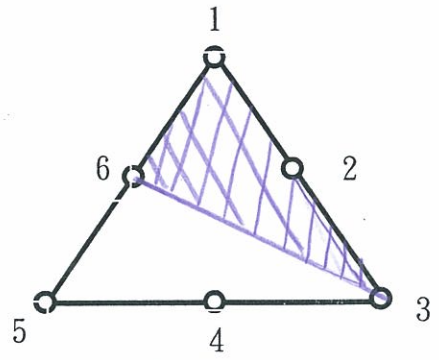
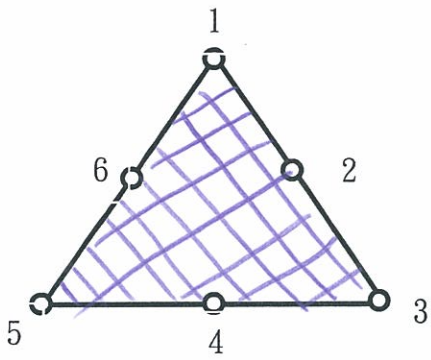
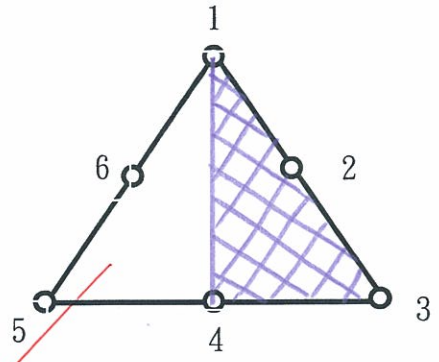
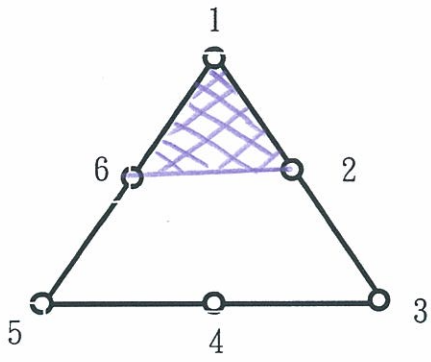
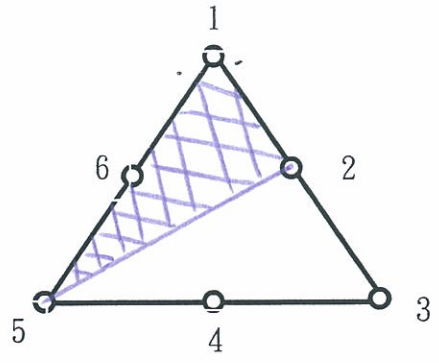
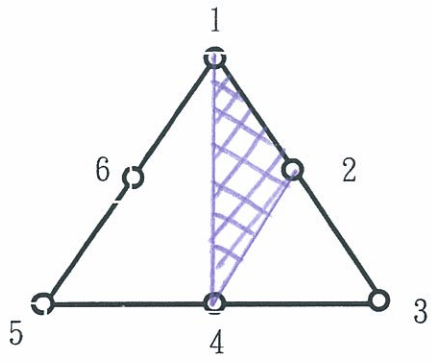
A: 244 個

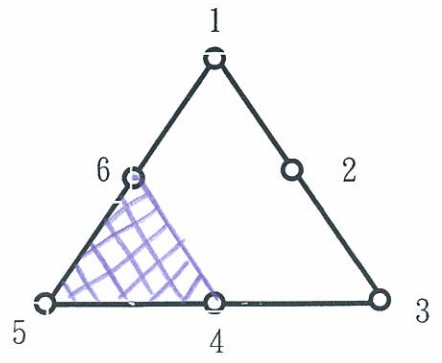
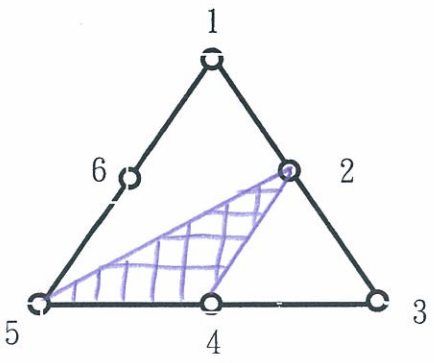
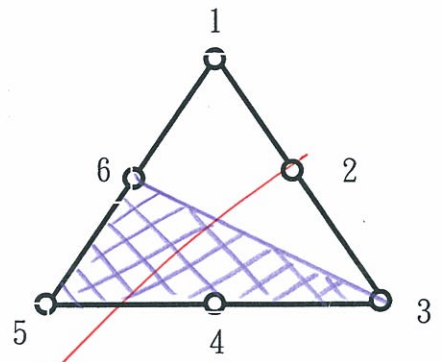
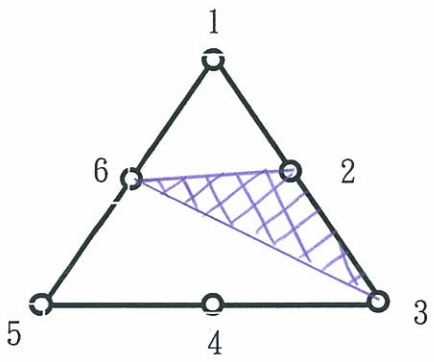
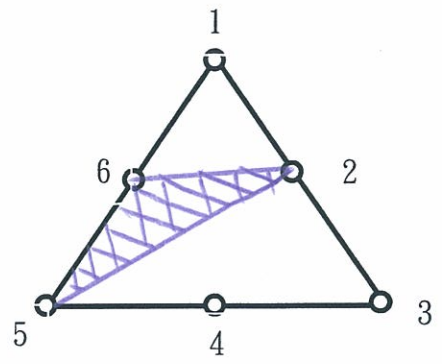
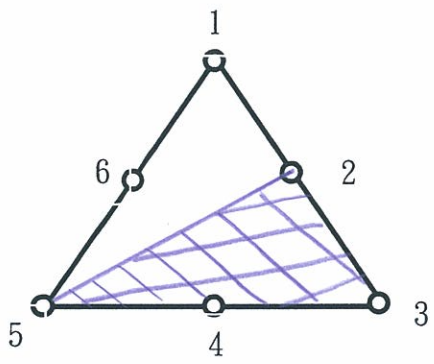
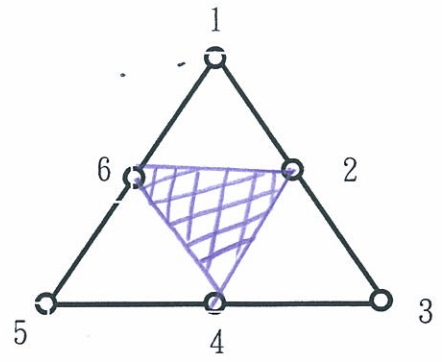
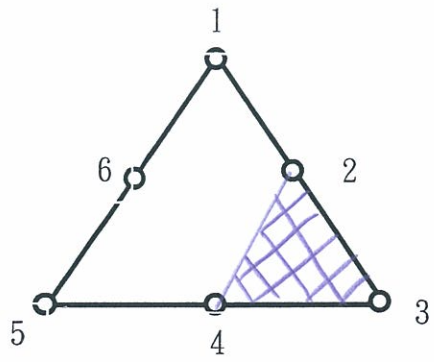
截止日期：104 年 12 月 11 日(星期五)下午 16:00

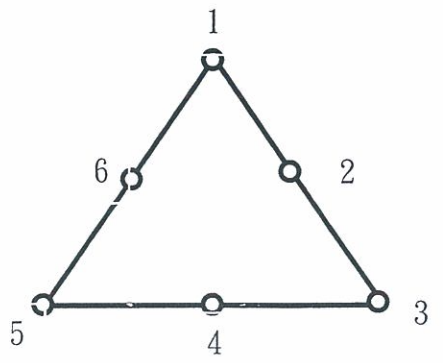
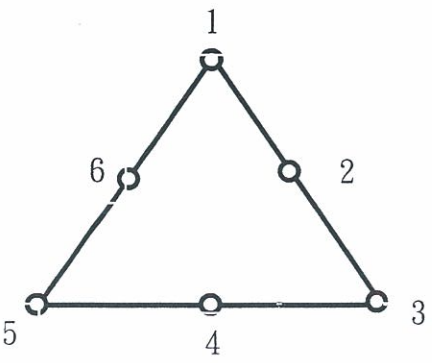
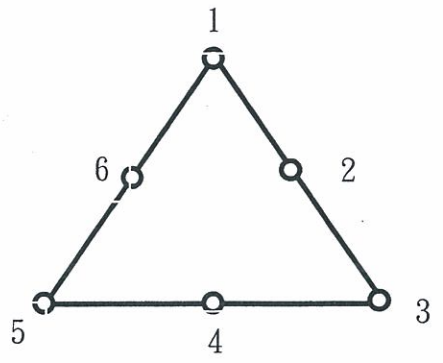
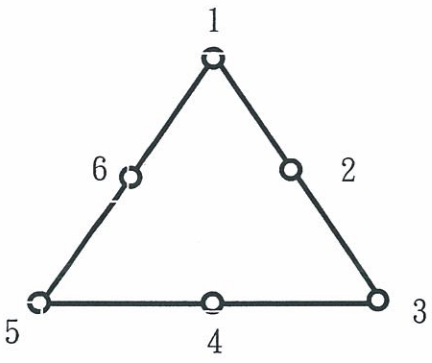
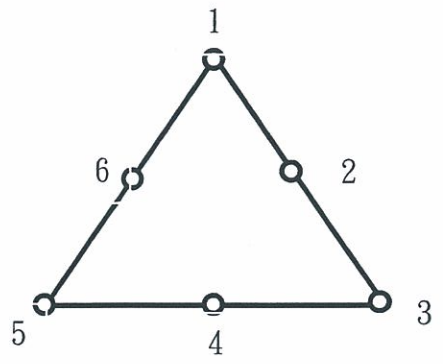
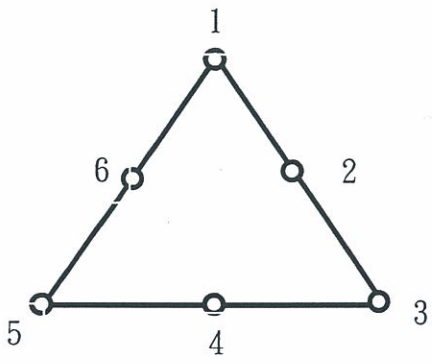
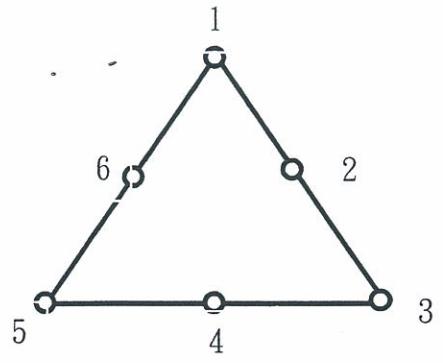
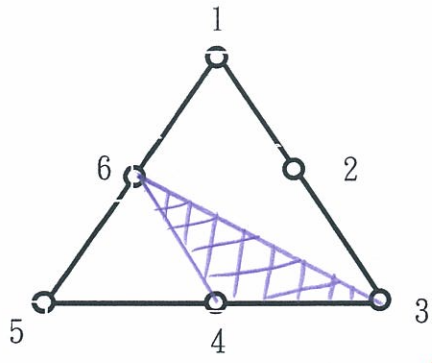
第一題之排列組合 --- 共 17 組

123	234	345	456
124	235	346	
125	236	356	
126	245		
134	246		
135	256		
136			
145			
146			
156			



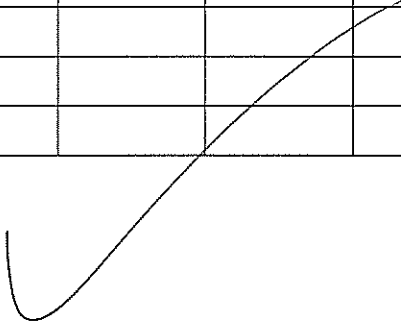


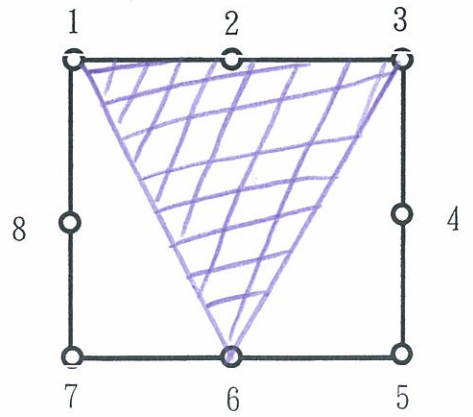
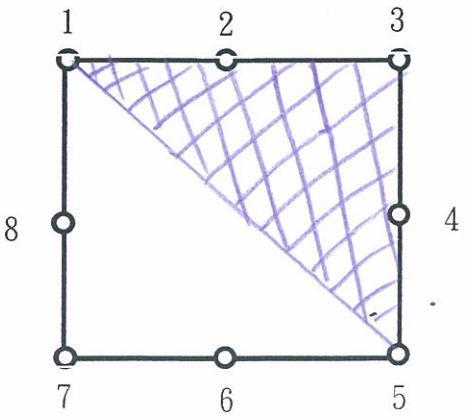
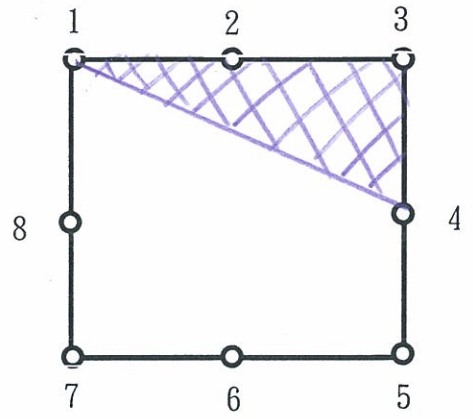
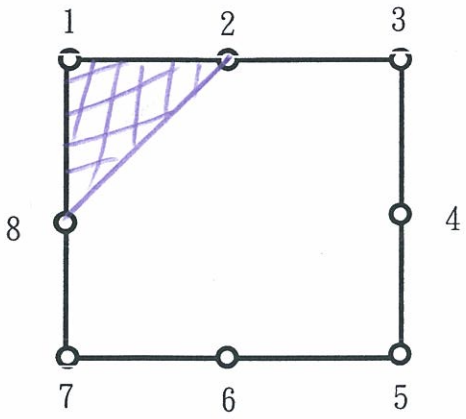
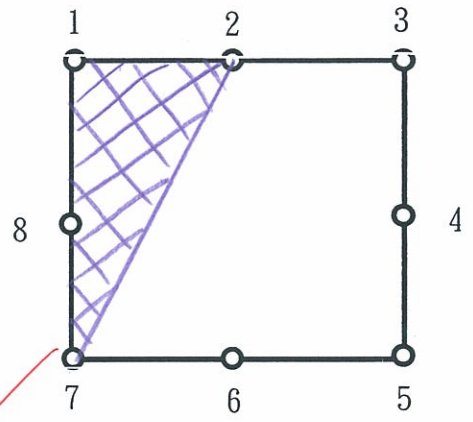
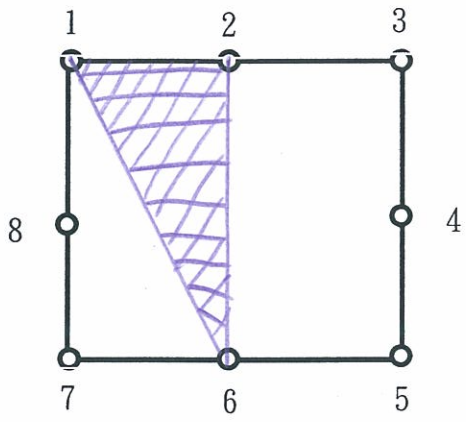
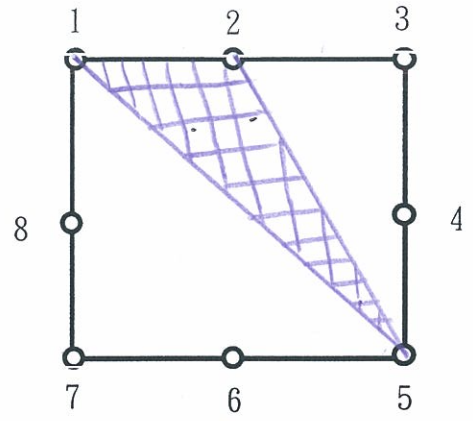
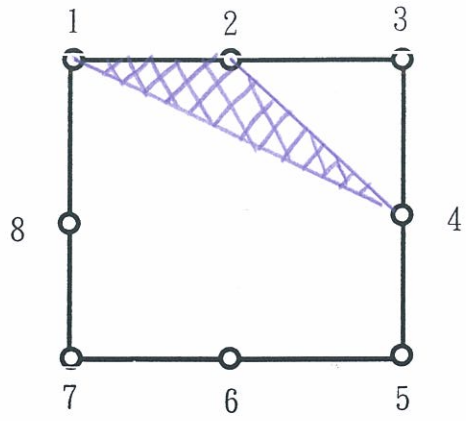


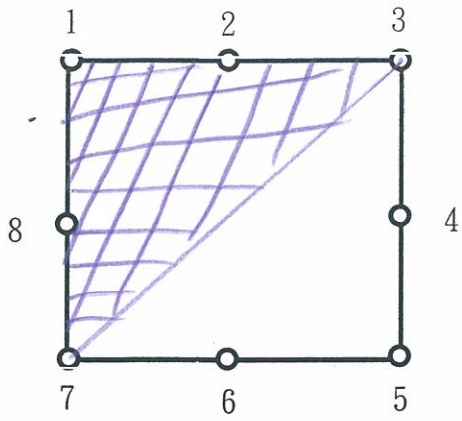


第二題之排列組合 - 共 52 組

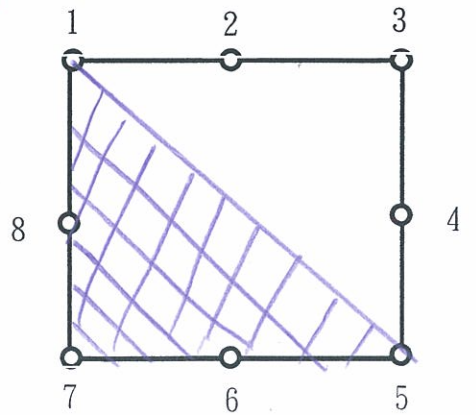
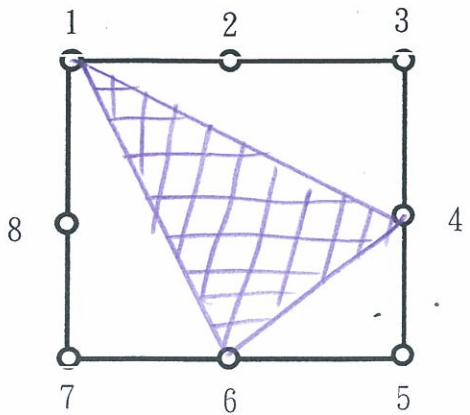
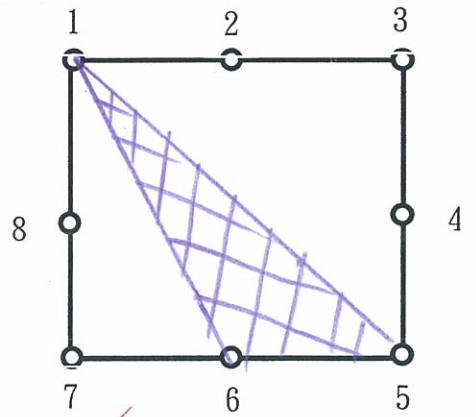
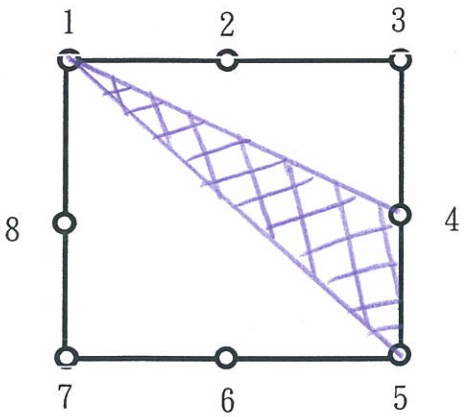
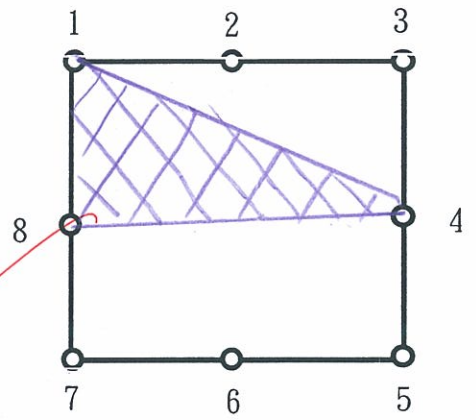
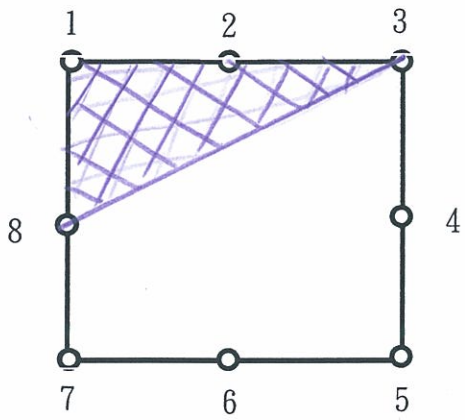
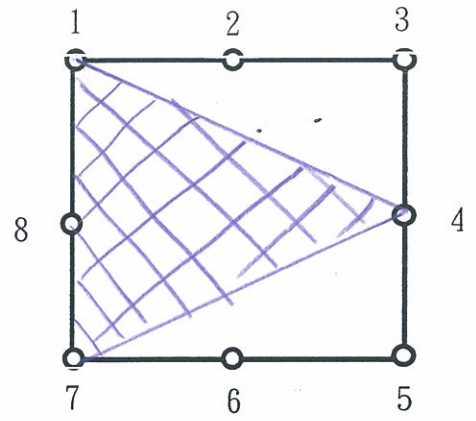
123	234	345	456	567	678
124	235	346	457	568	
125	236	347	458	578	
126	237	348	467		
127	238	356	468		
128	245	357	478		
134	246	358			
135	247	367			
136	248	368			
137	256	378			
138	257				
145	258				
146	267				
147	268				
148	278				
156					
157					
158					
167					
168					
178					



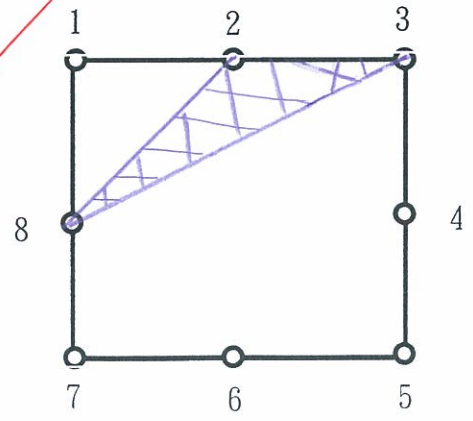
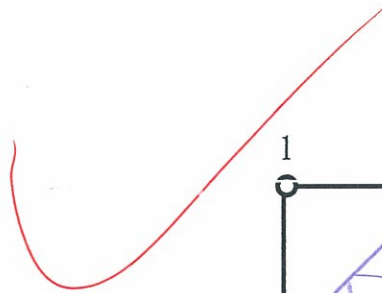
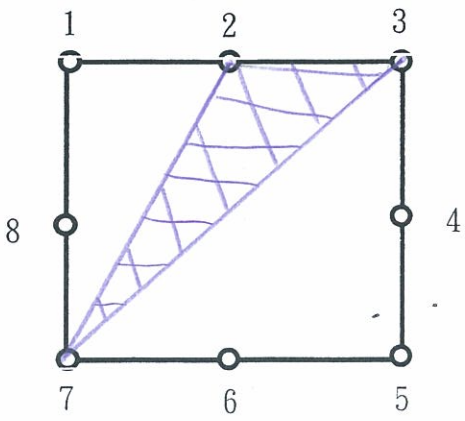
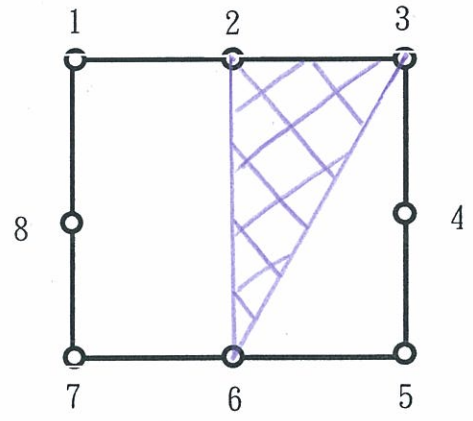
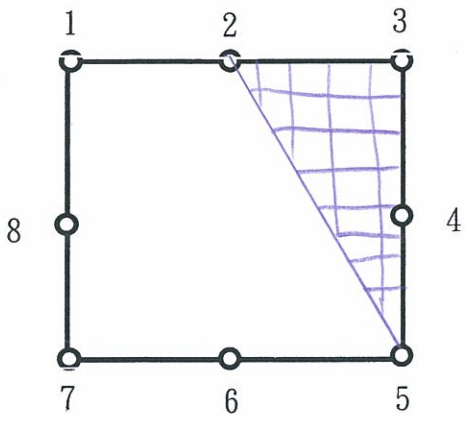
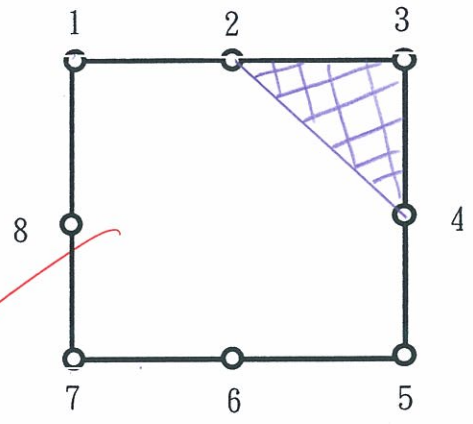
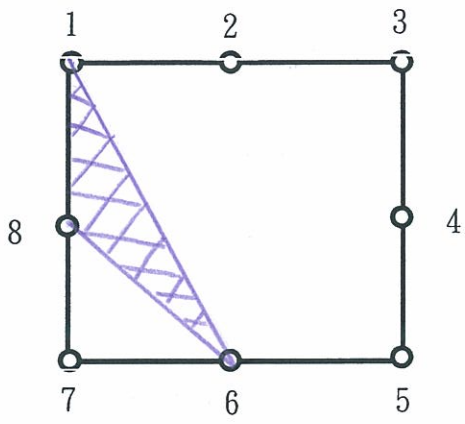
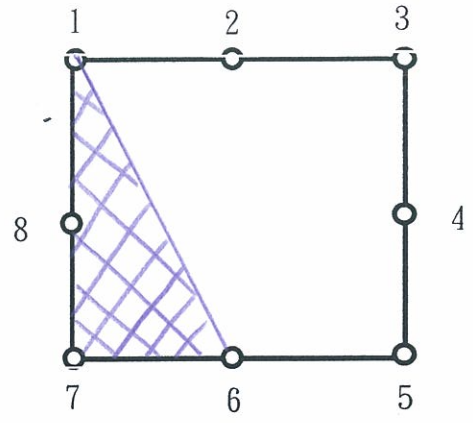
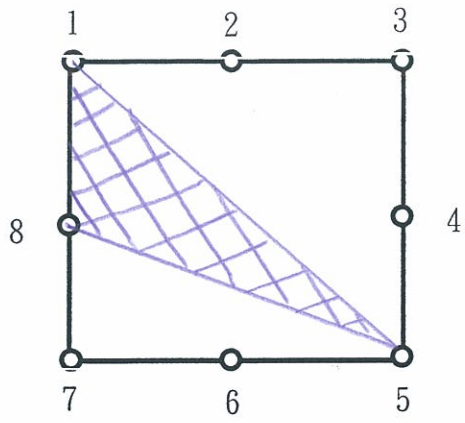




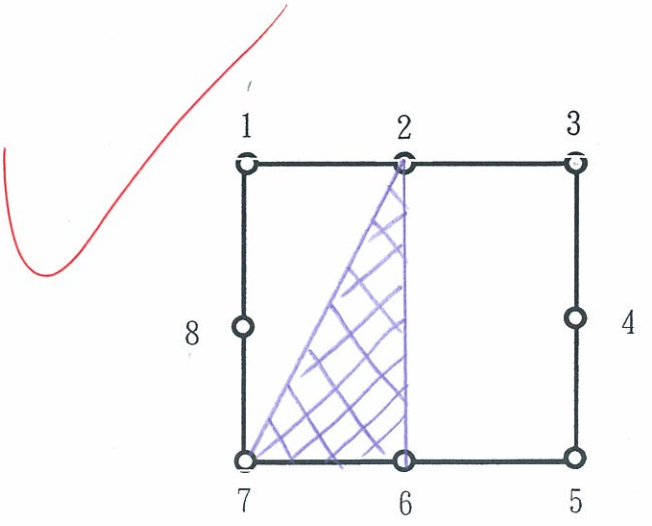
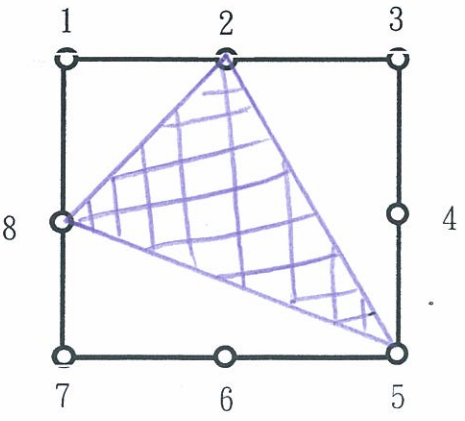
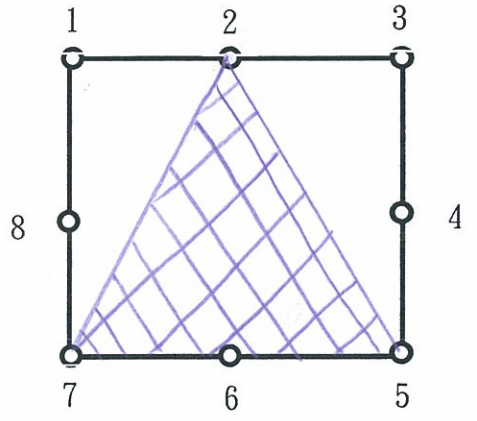
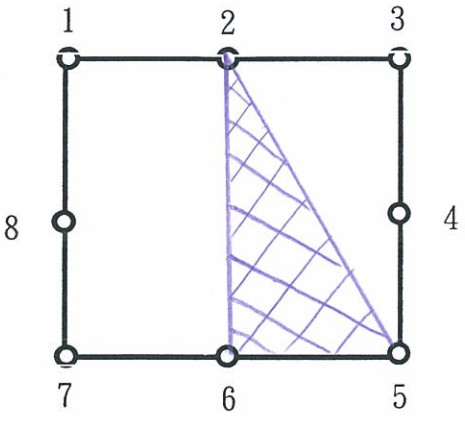
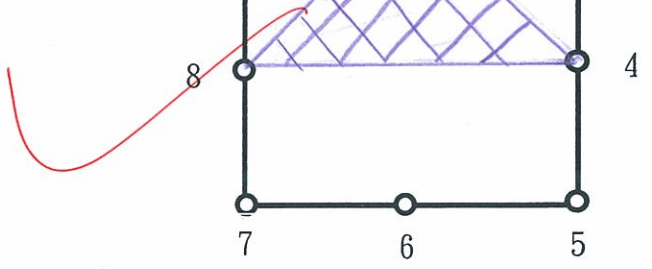
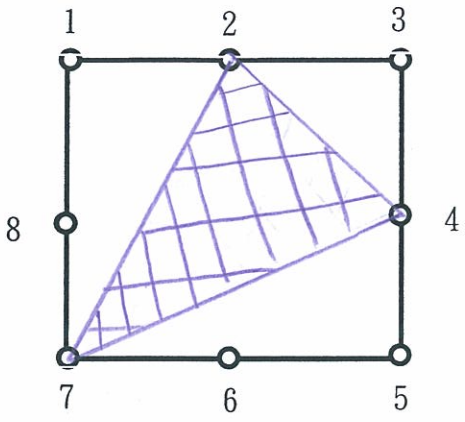
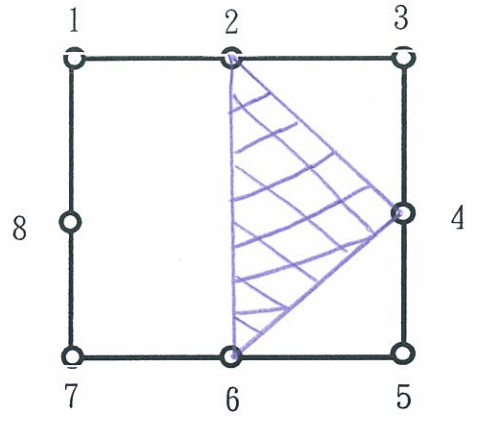
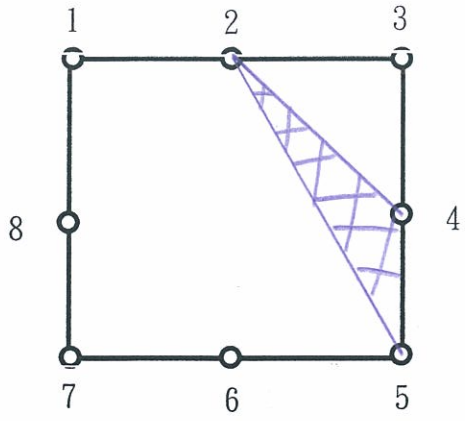
(2)



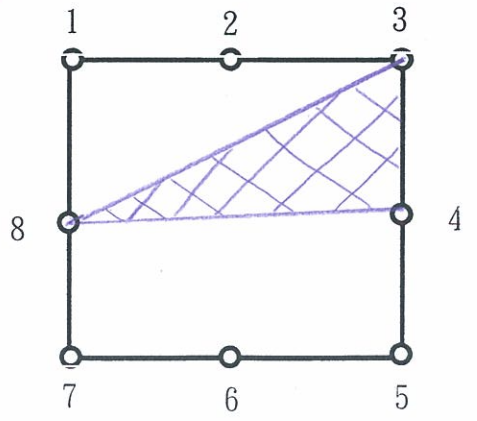
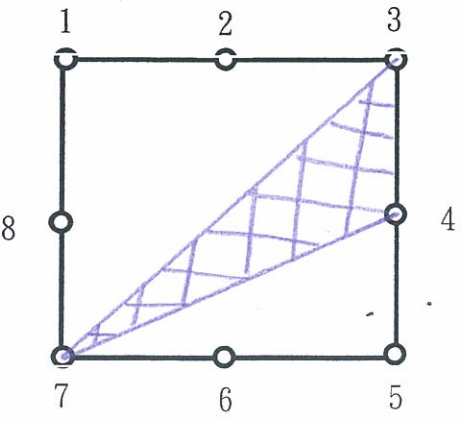
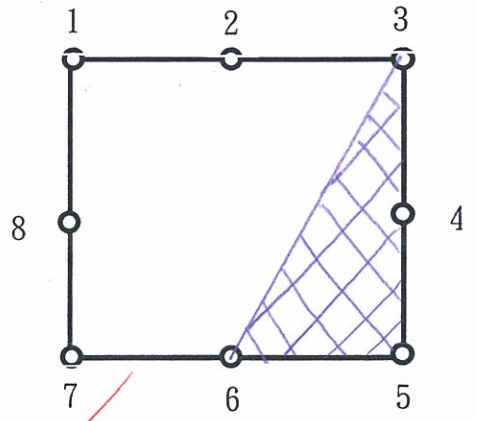
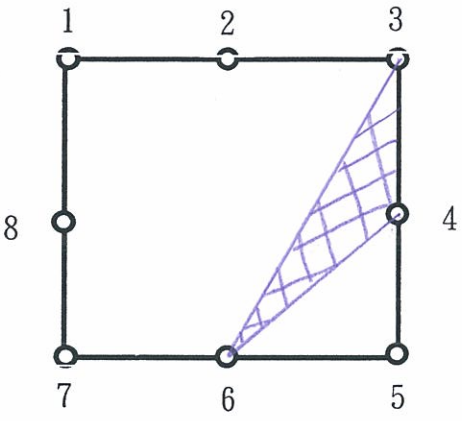
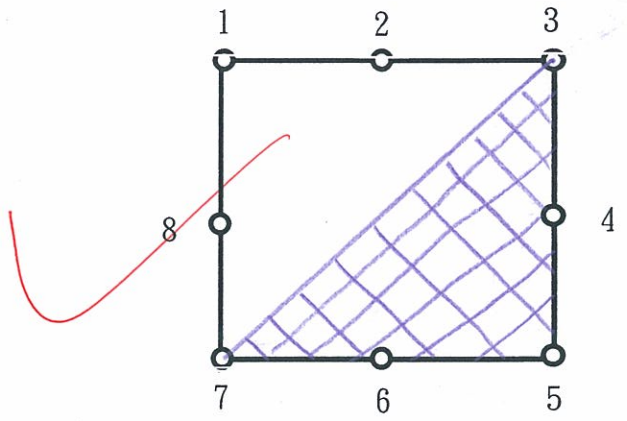
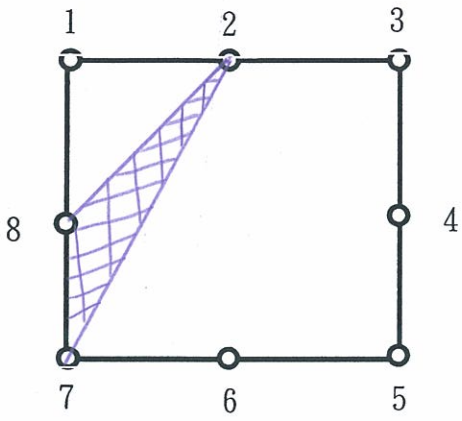
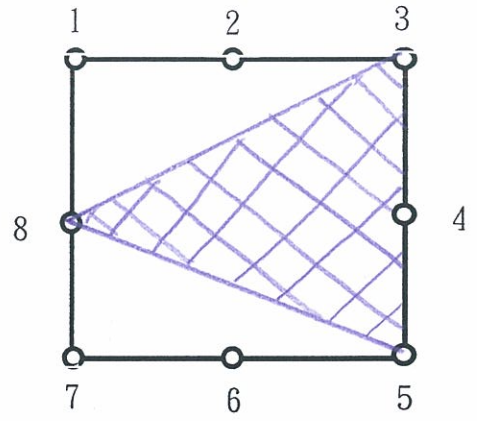
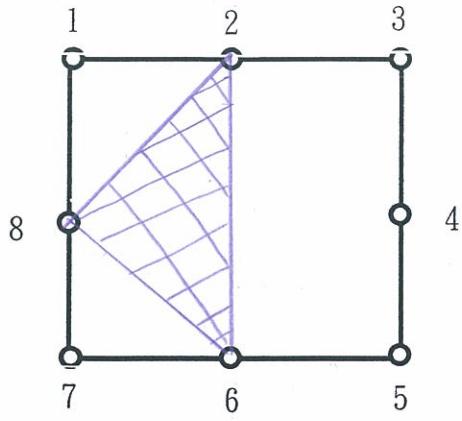
3



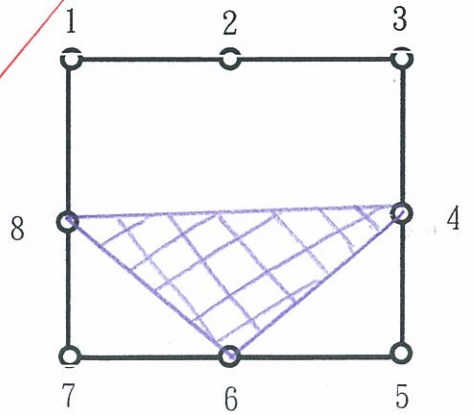
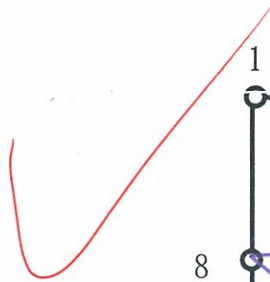
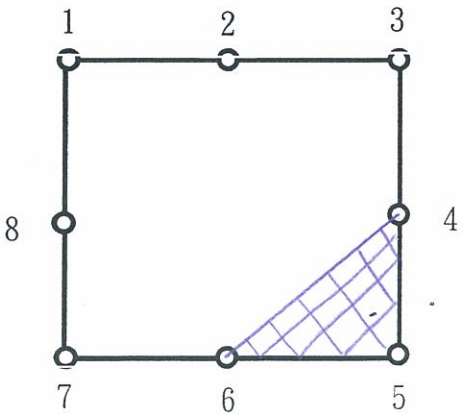
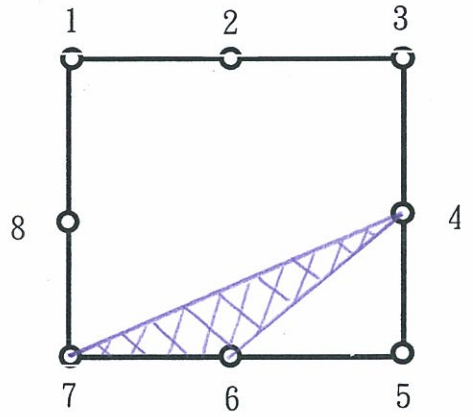
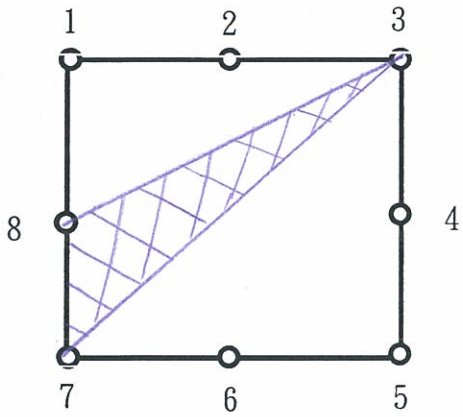
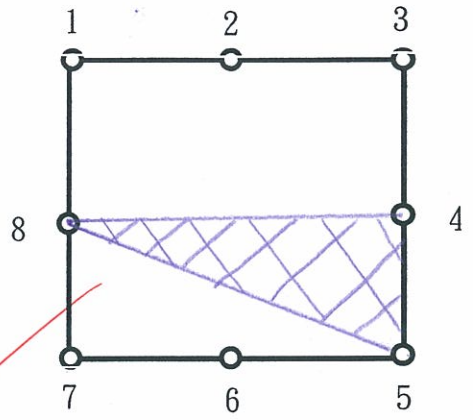
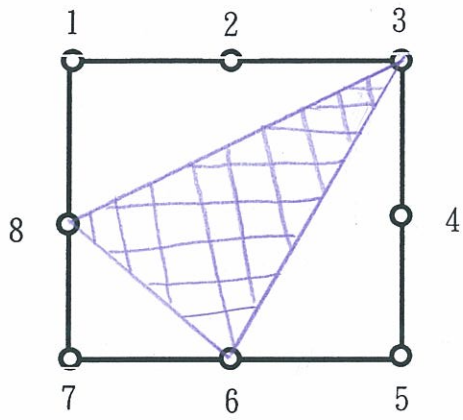
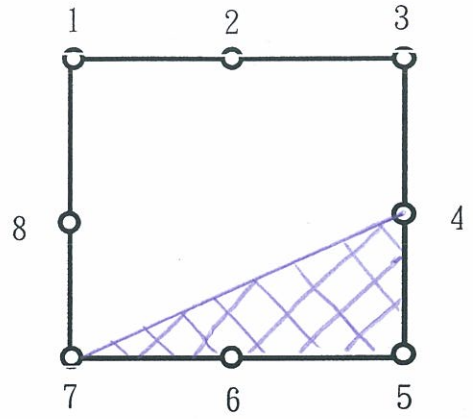
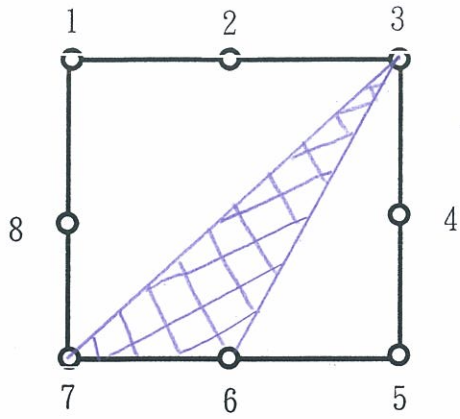
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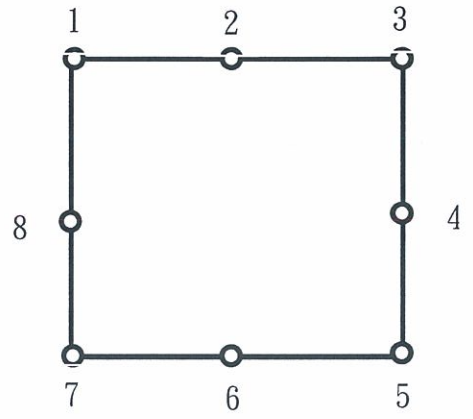
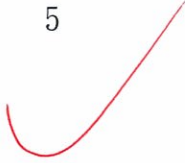
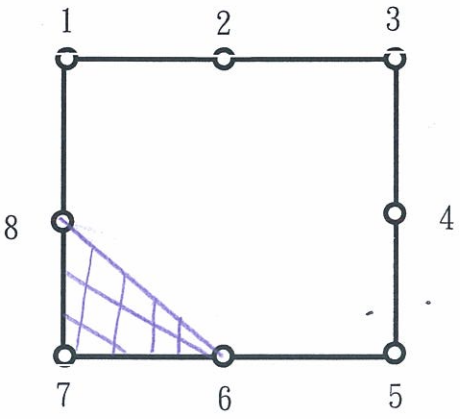
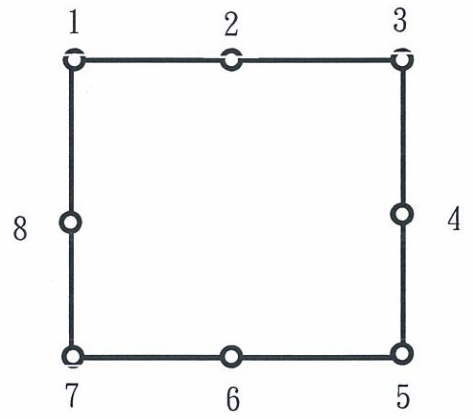
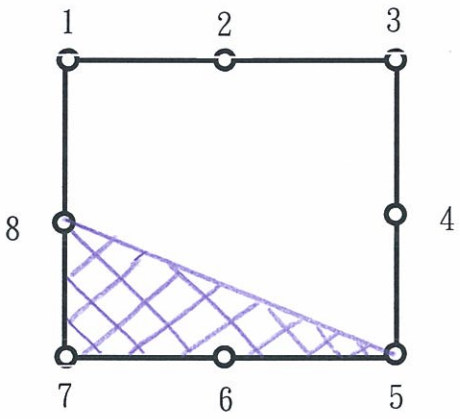
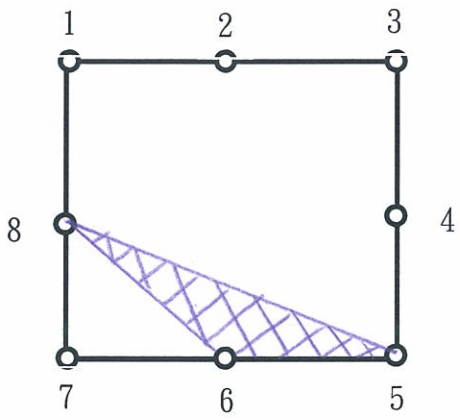
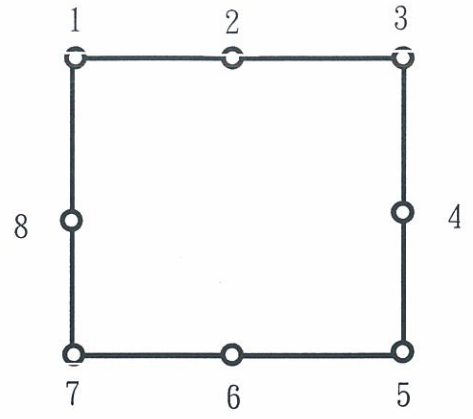
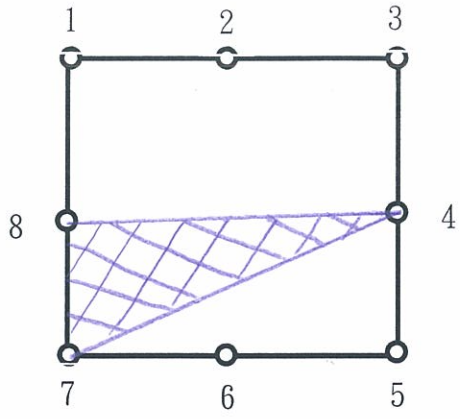
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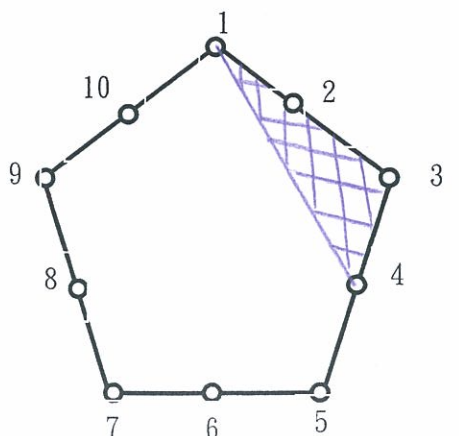
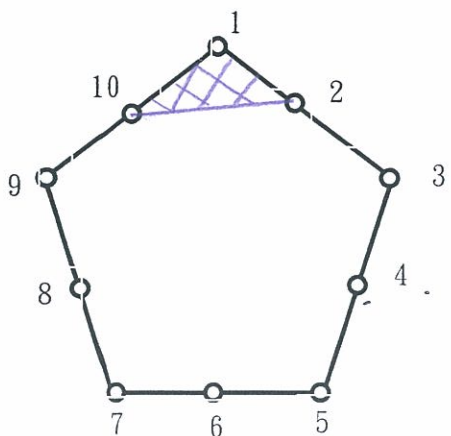
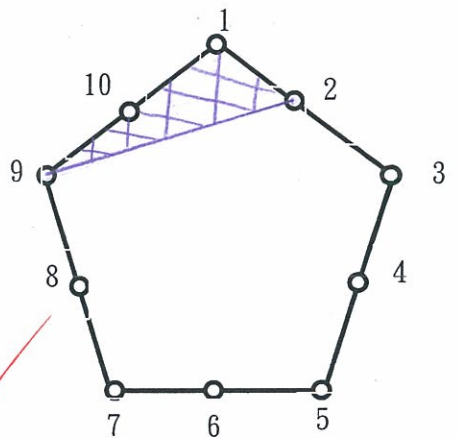
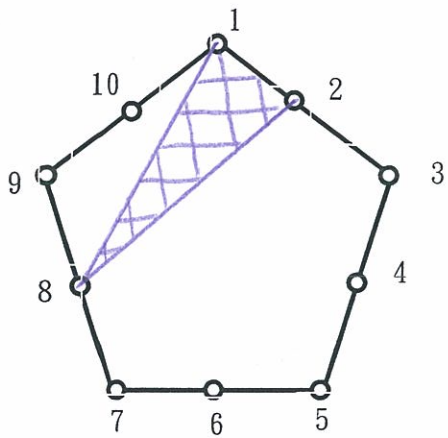
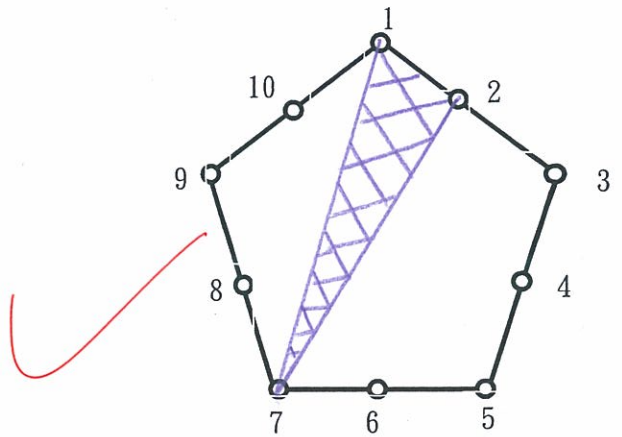
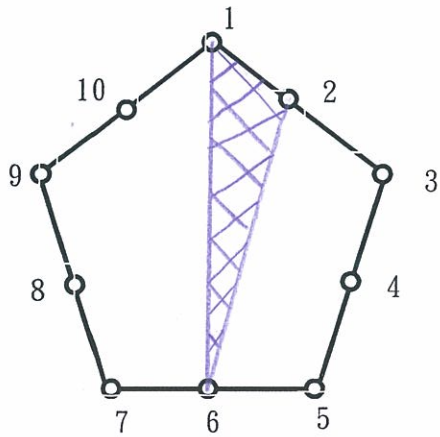
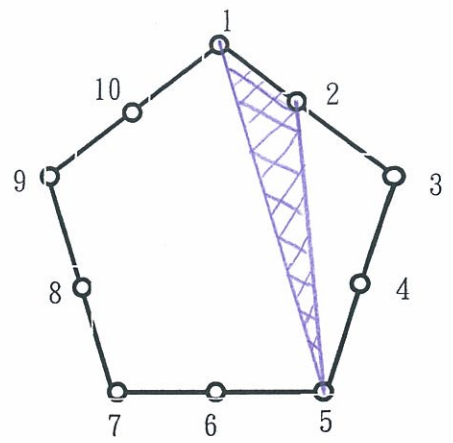
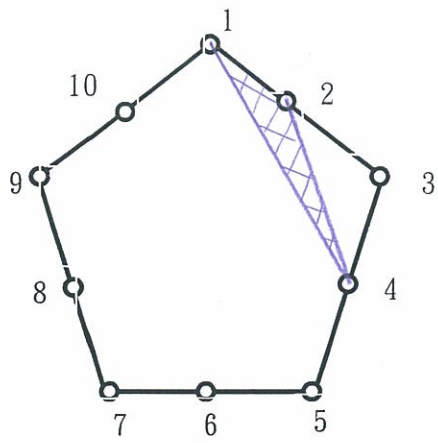


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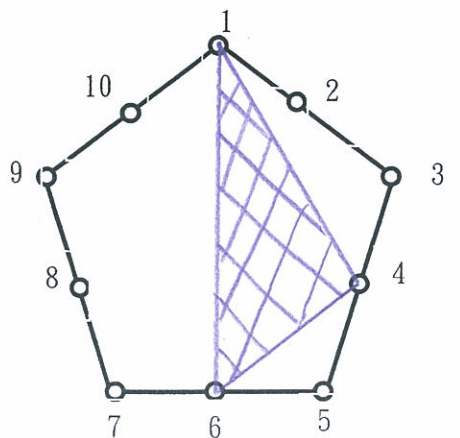
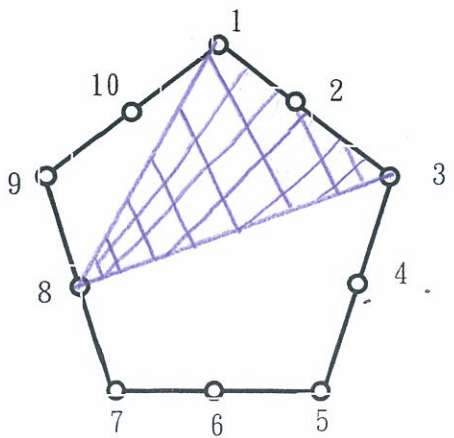
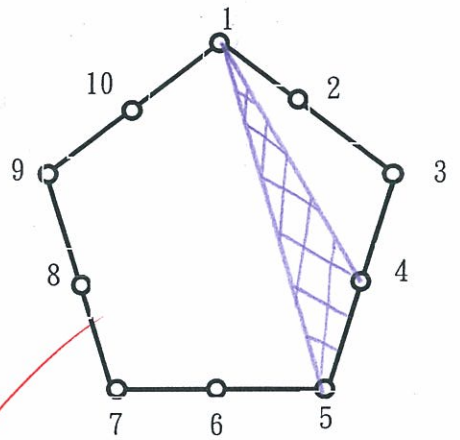
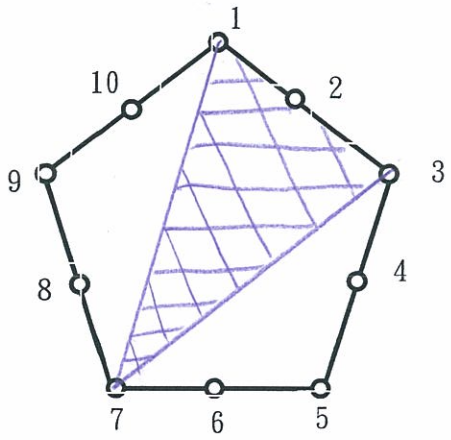
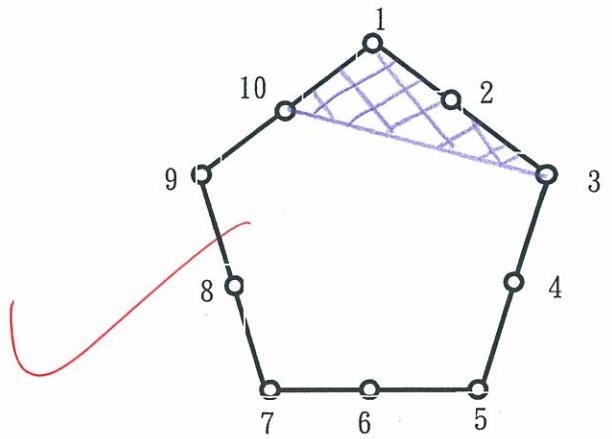
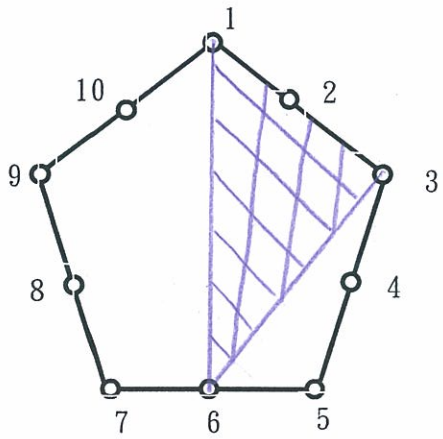
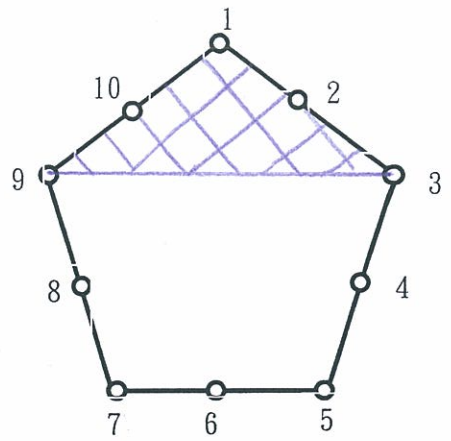
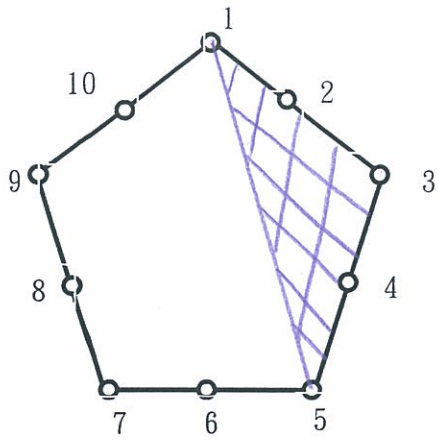


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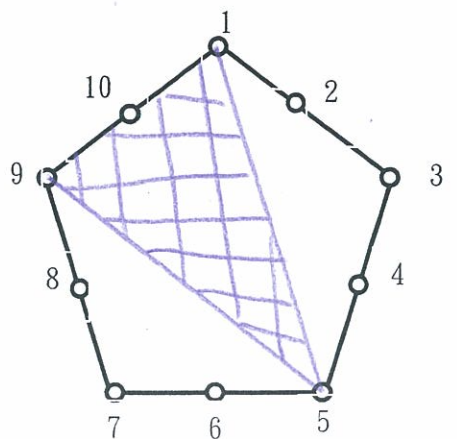
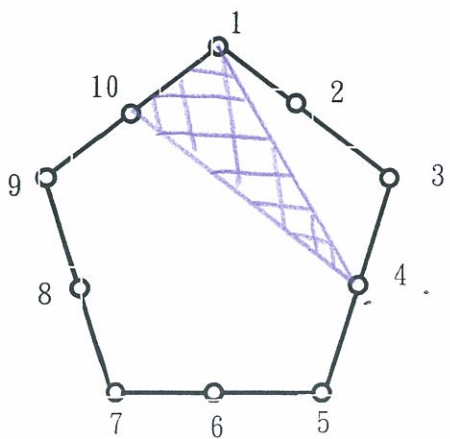
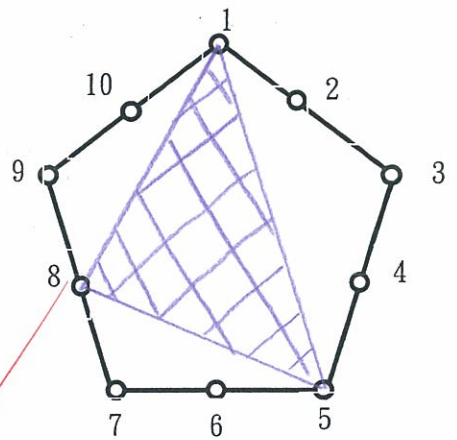
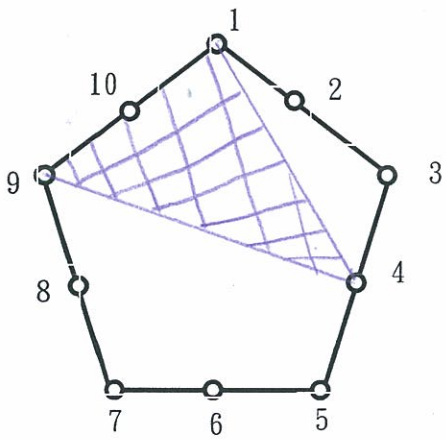
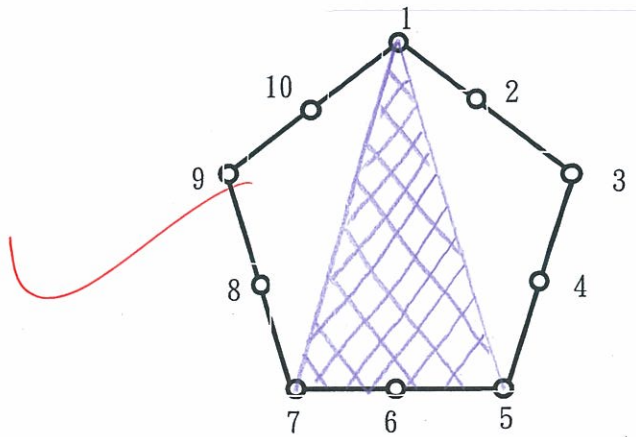
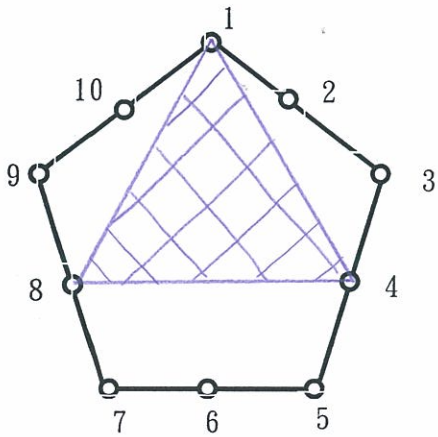
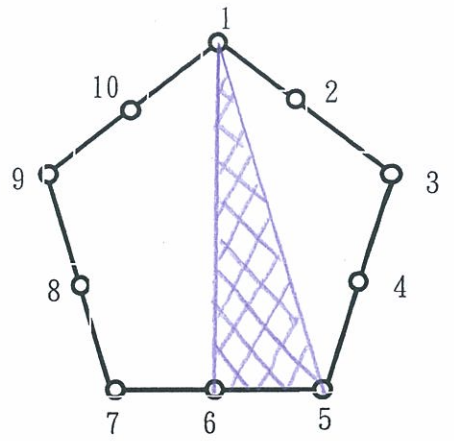
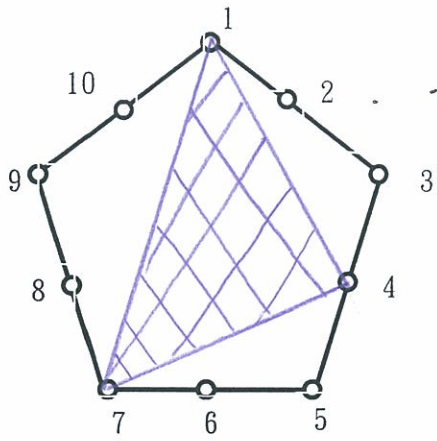
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127	238	349	4510	578	6810		
128	239	3410	467	579	6910		
129	2310	356	468	5710			
1210	245	357	469	589			
134	246	358	4610	5810			
135	247	359	478	5910			
136	248	3510	479				
137	249	367	4710				
138	2410	368	489				
139	256	369	4810				
1310	257	3610	4910				
145	258	378					
146	259	379					
147	2510	3710					
148	267	389					
149	268	3810					
1410	269	3910					
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1510	289						
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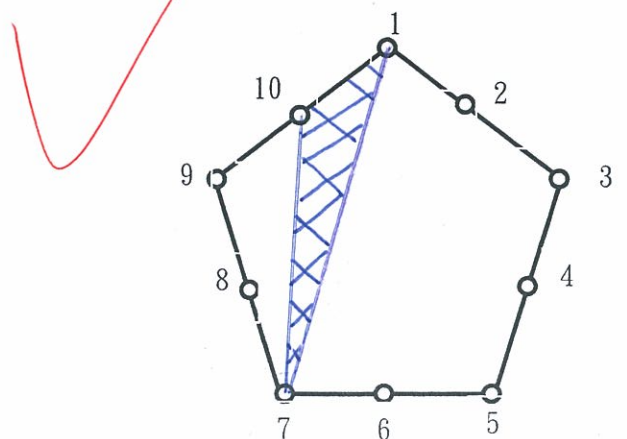
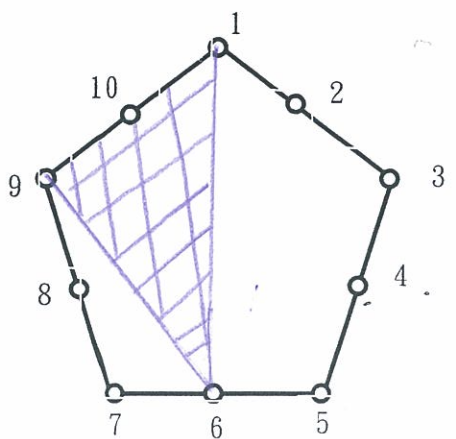
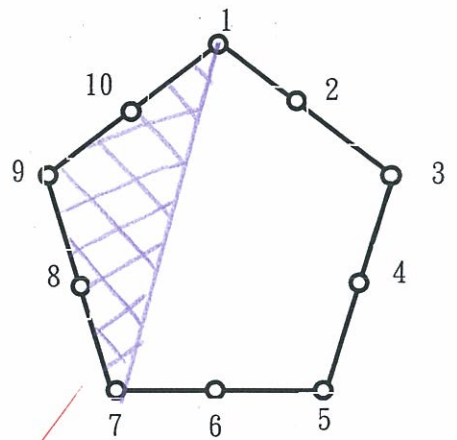
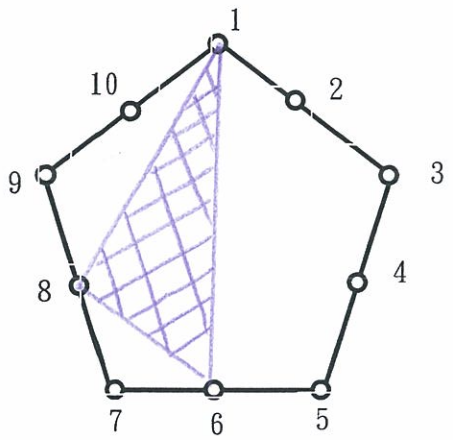
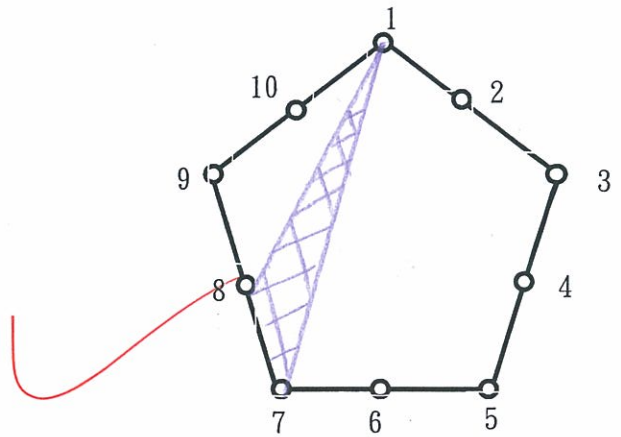
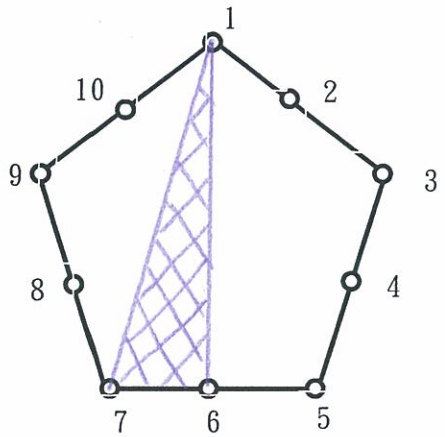
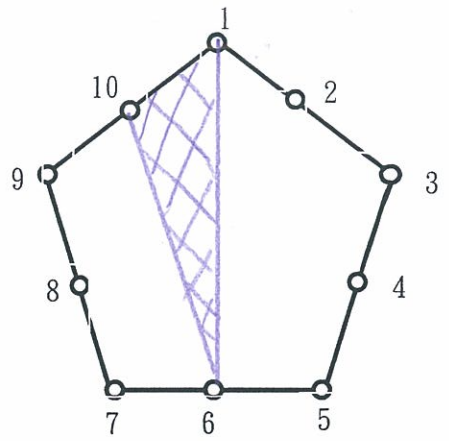
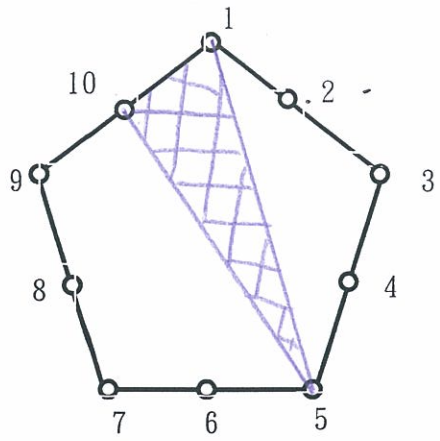
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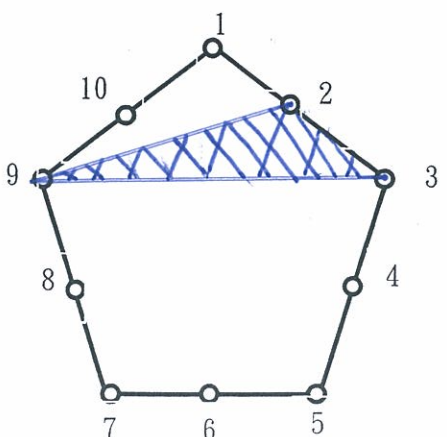
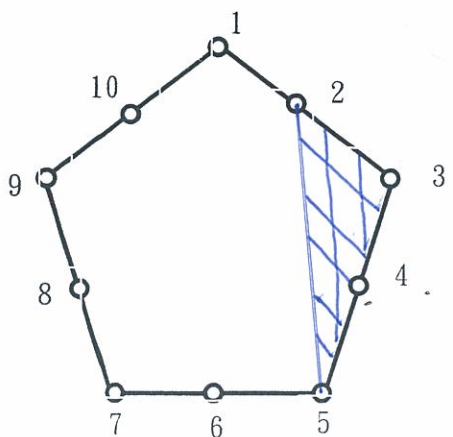
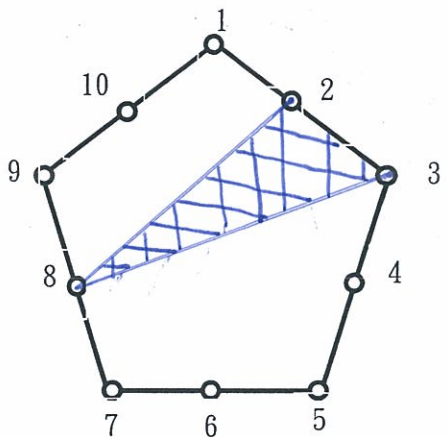
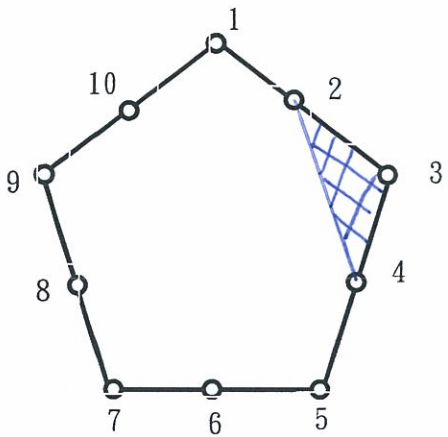
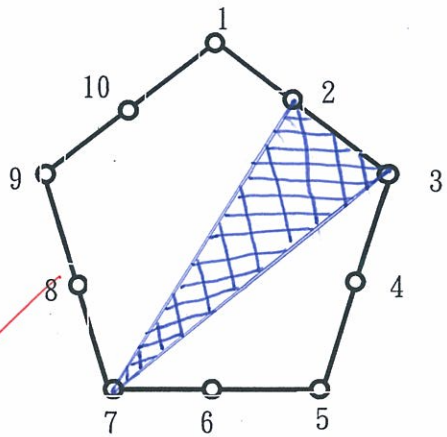
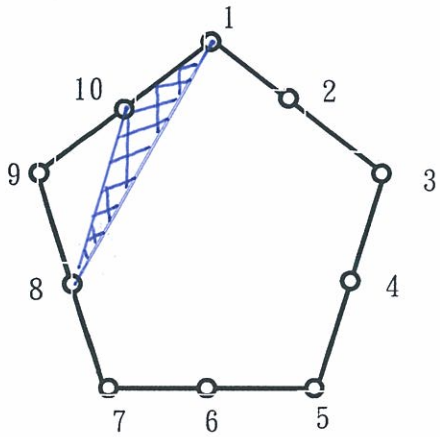
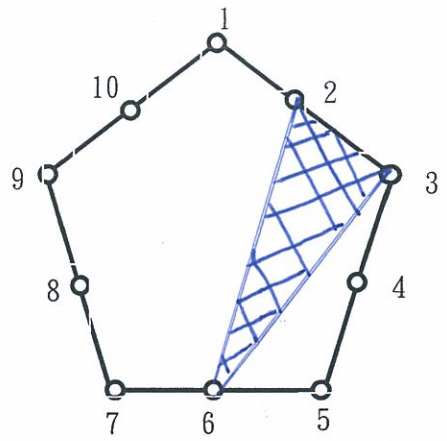
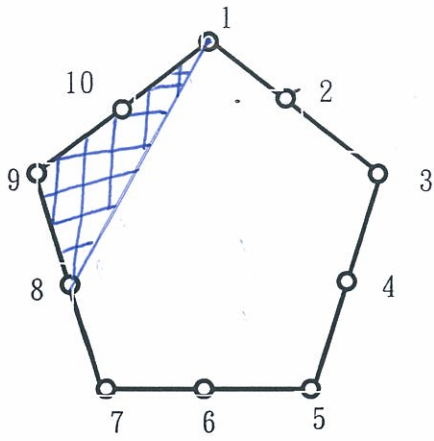
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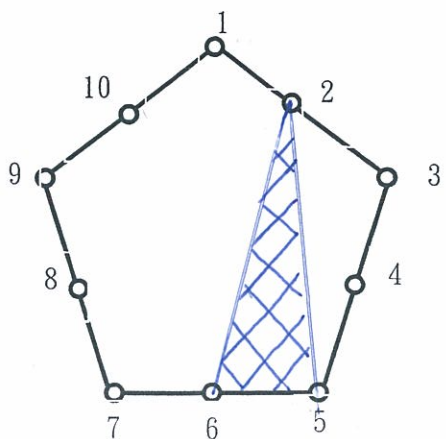
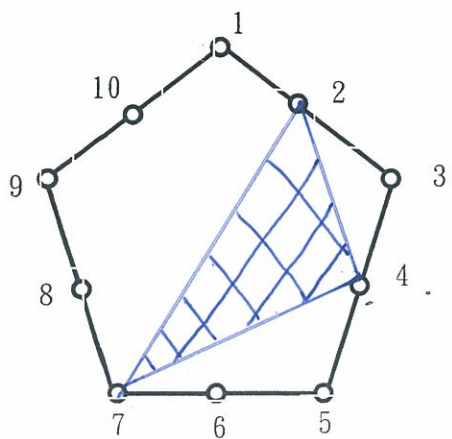
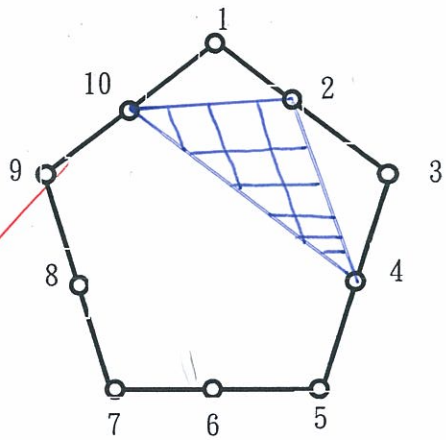
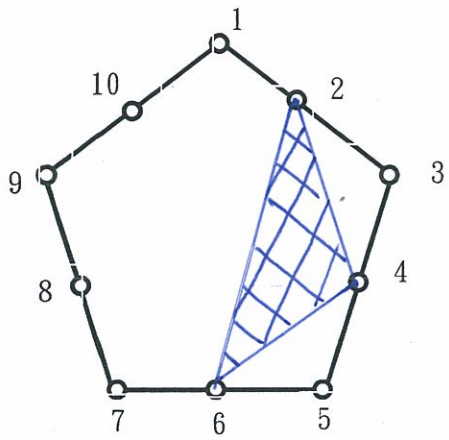
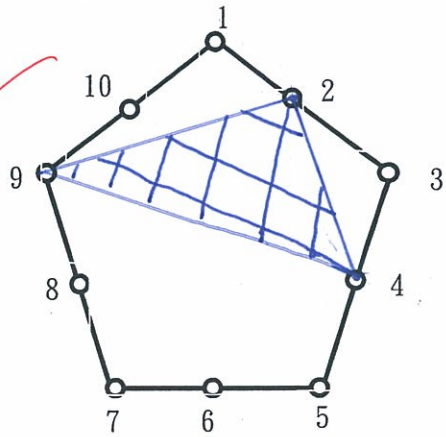
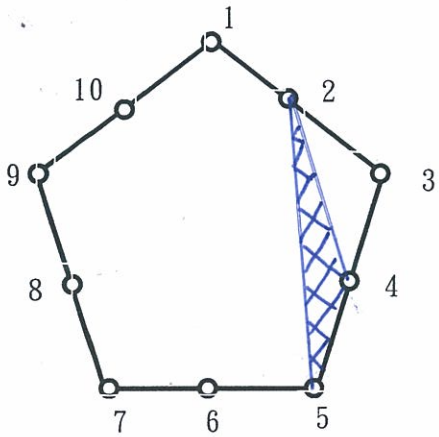
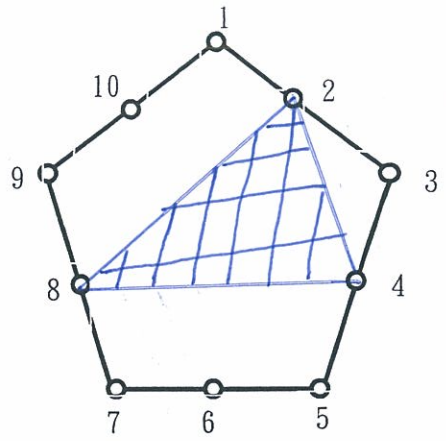
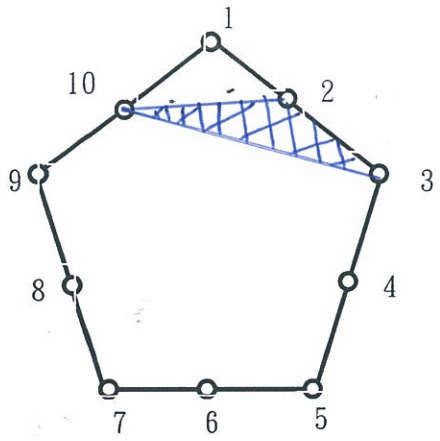
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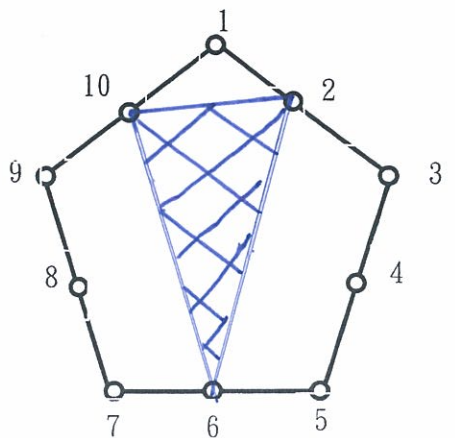
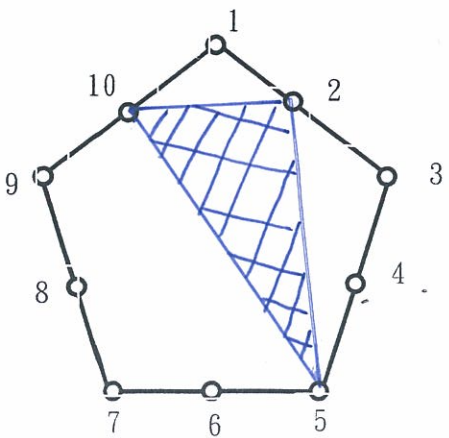
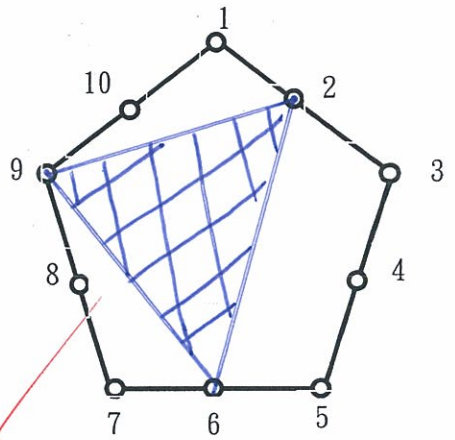
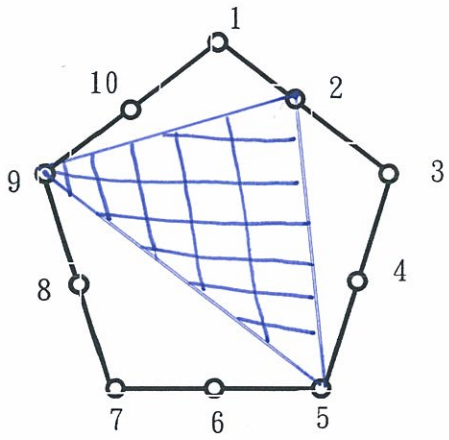
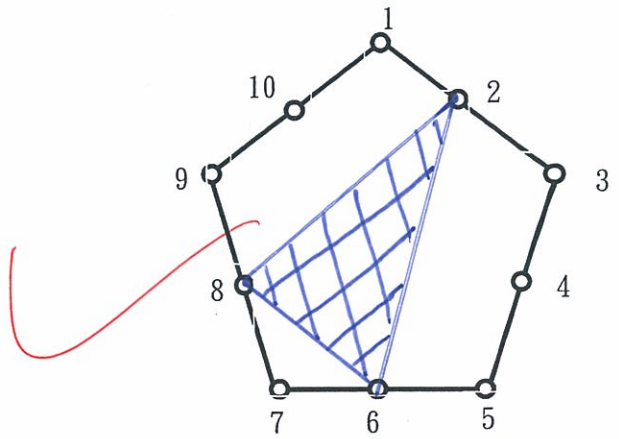
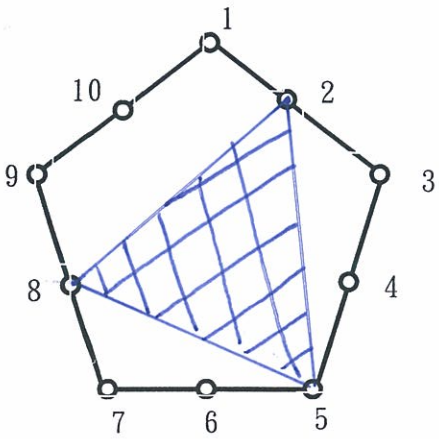
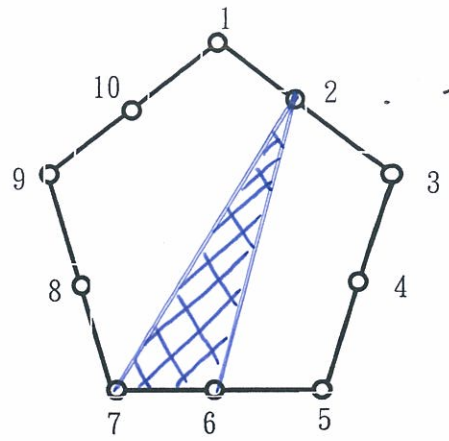
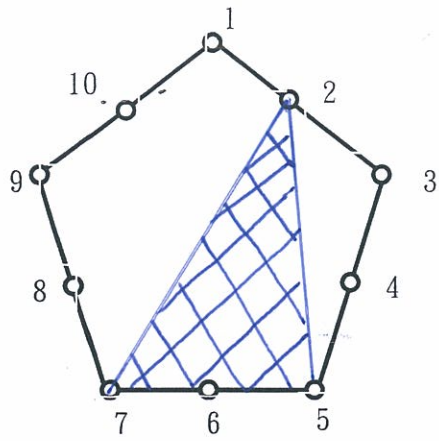
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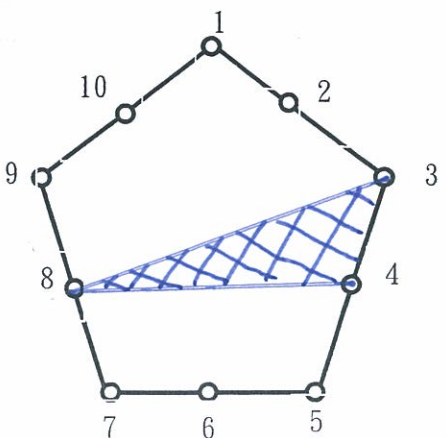
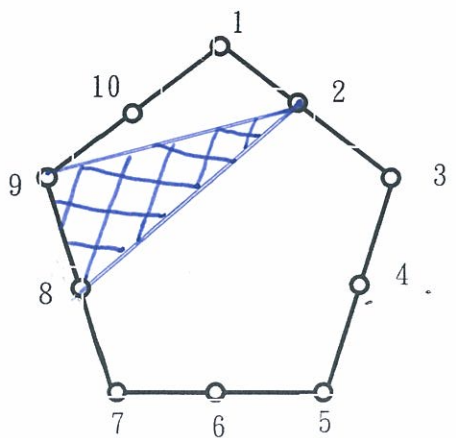
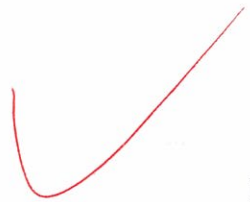
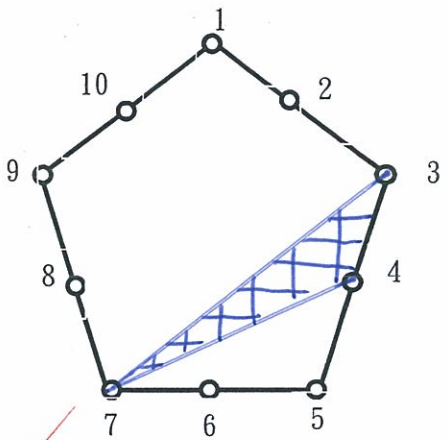
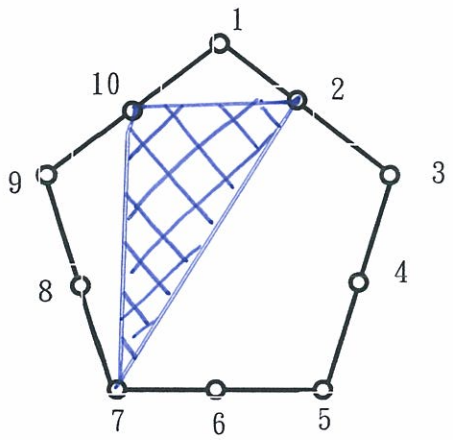
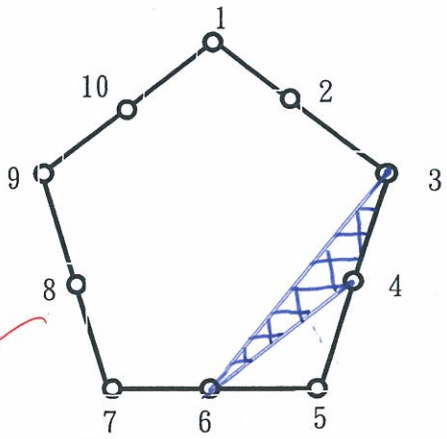
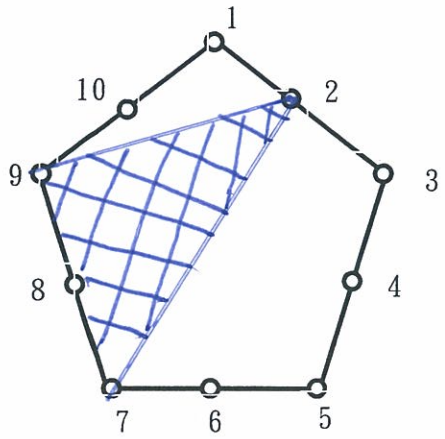
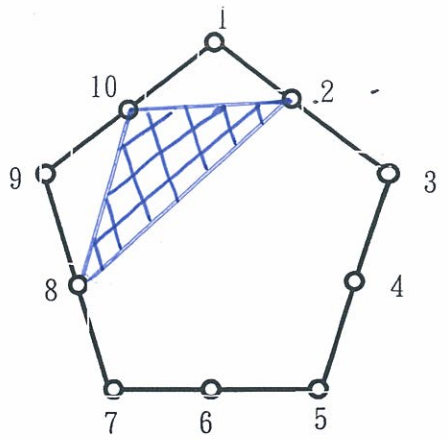
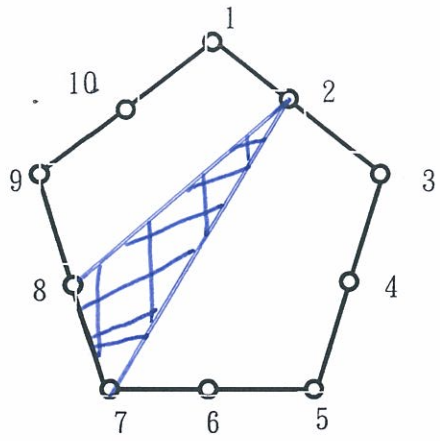
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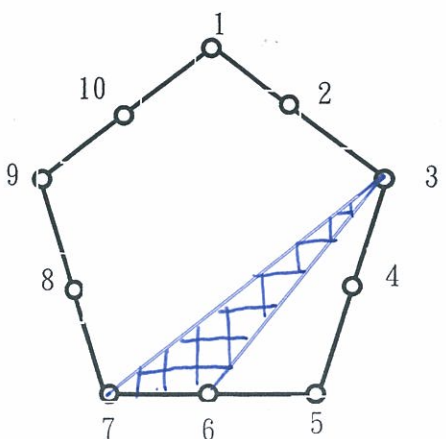
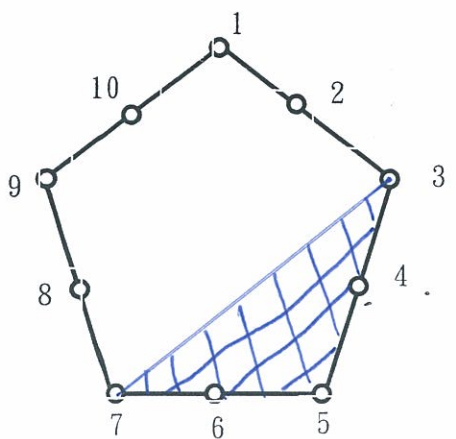
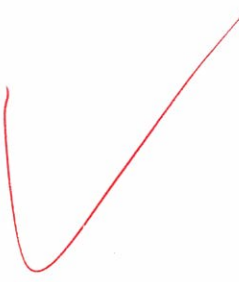
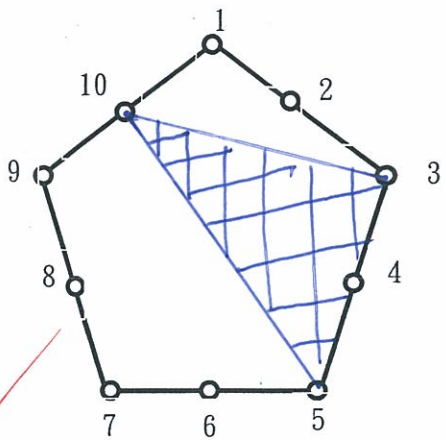
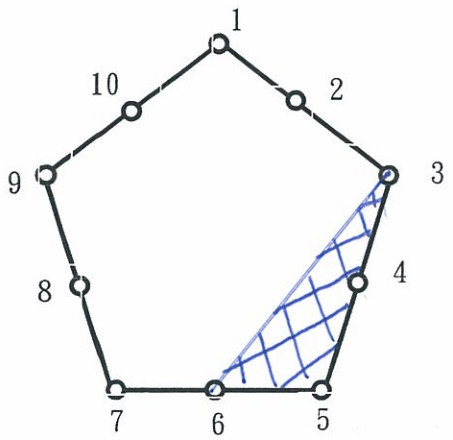
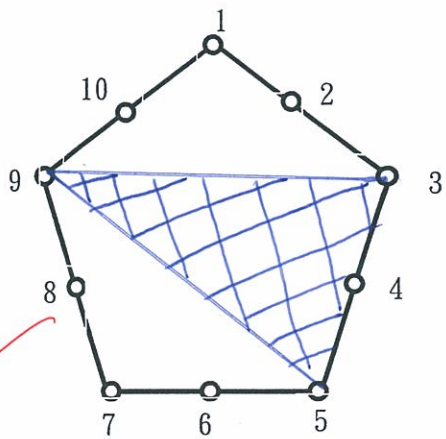
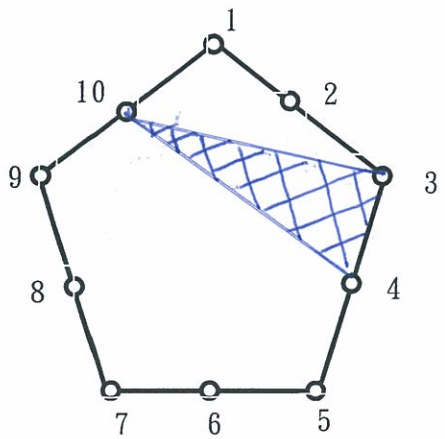
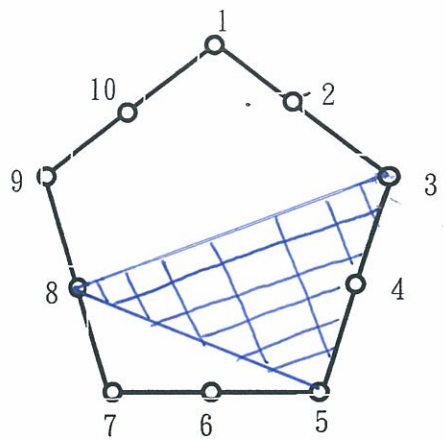
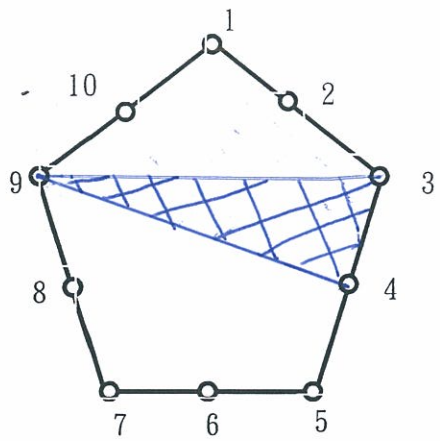
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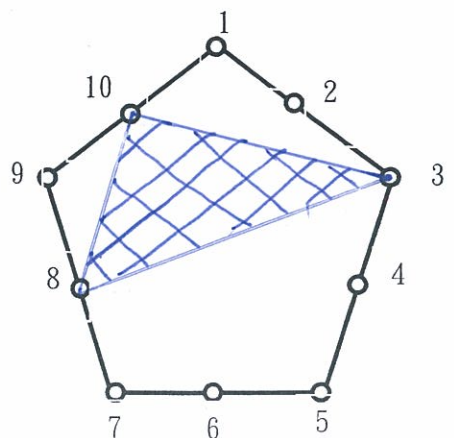
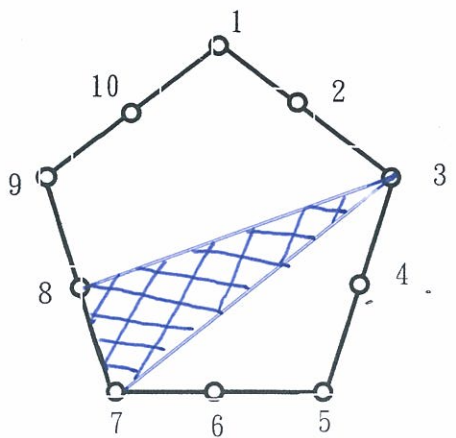
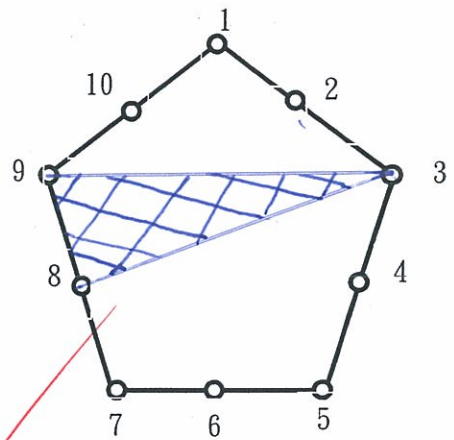
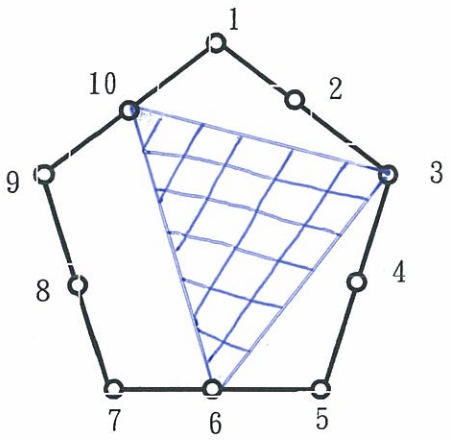
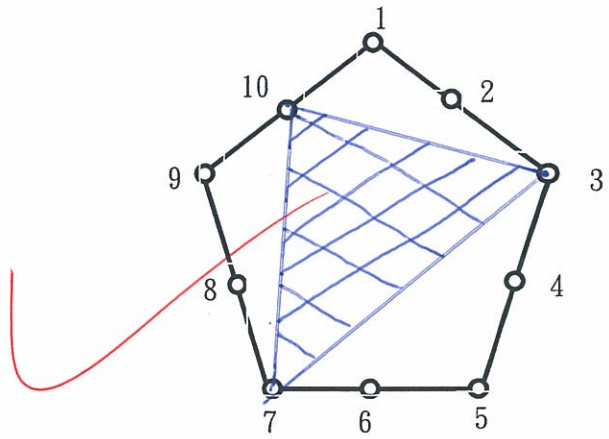
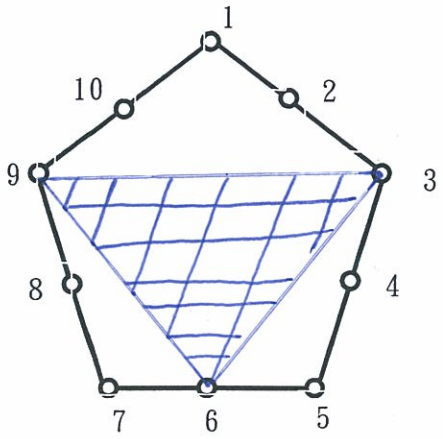
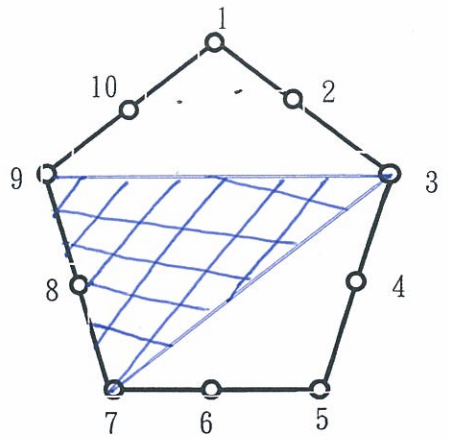
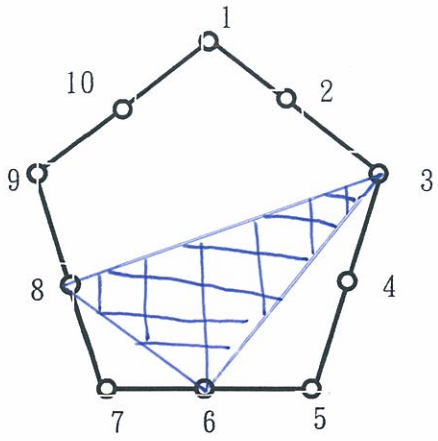
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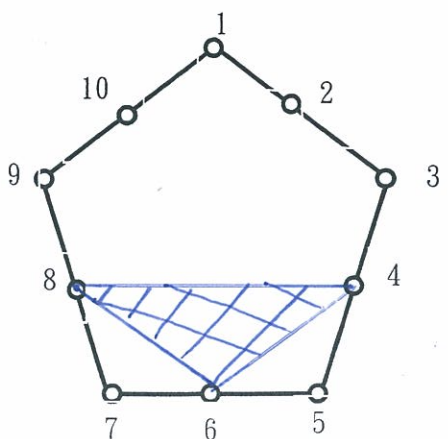
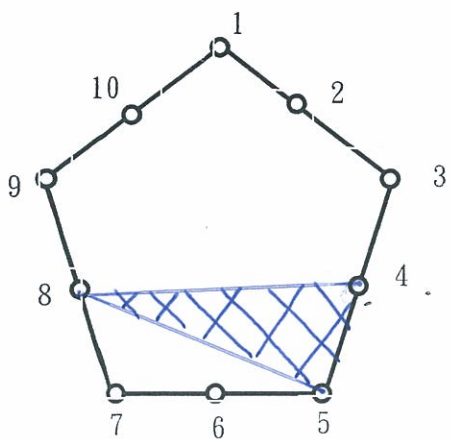
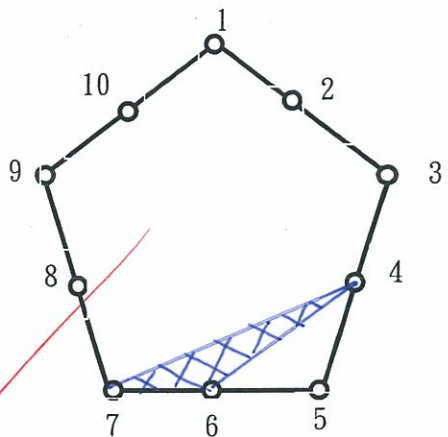
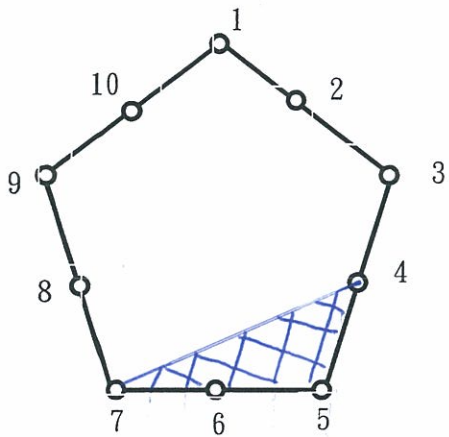
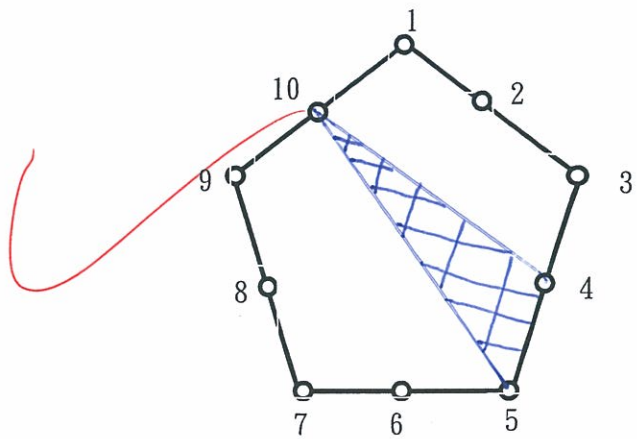
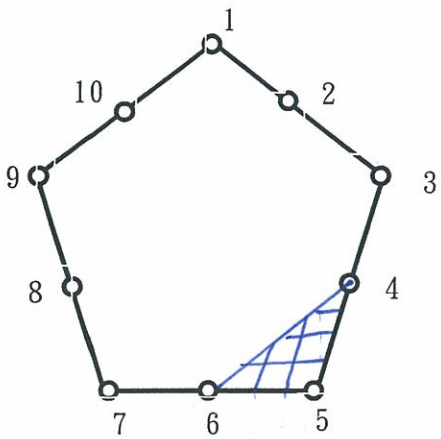
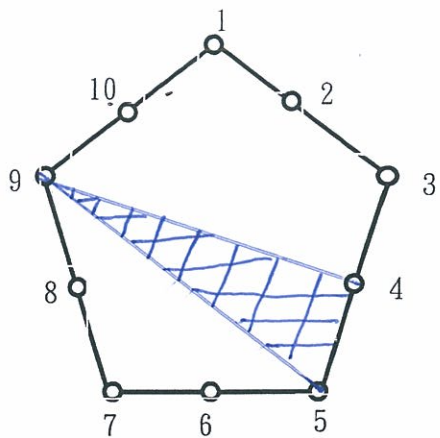
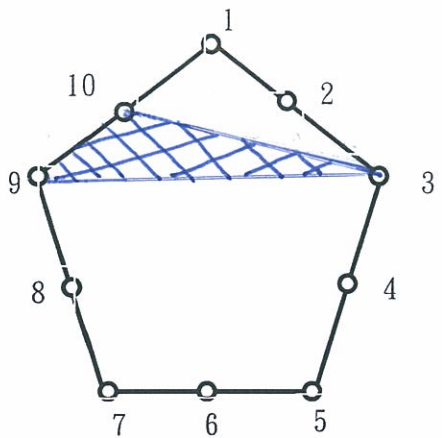
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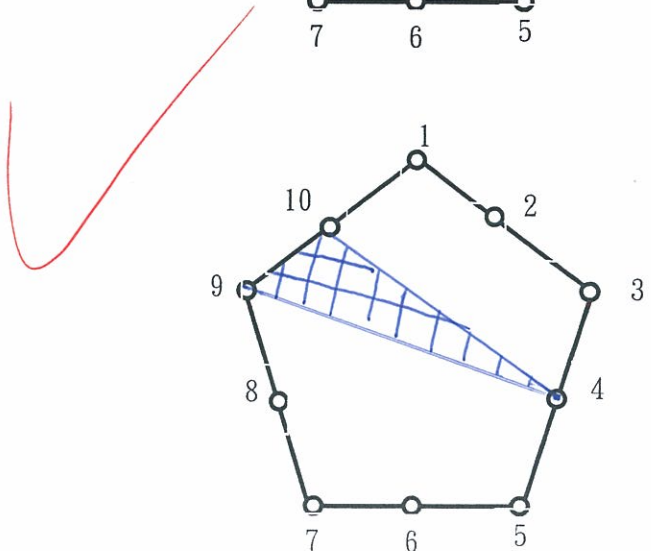
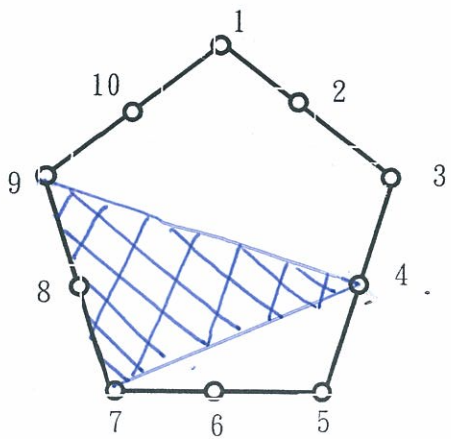
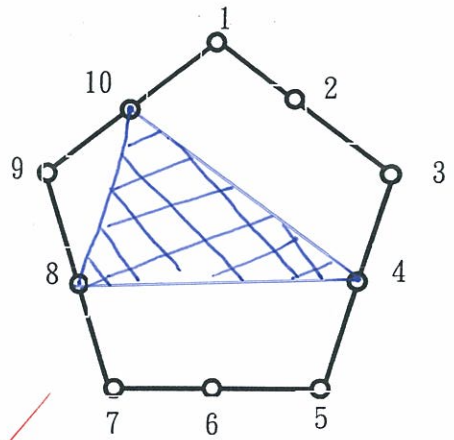
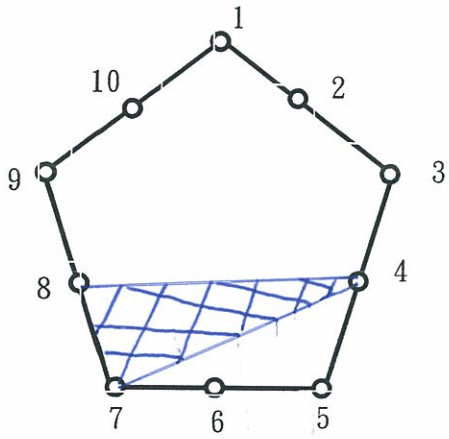
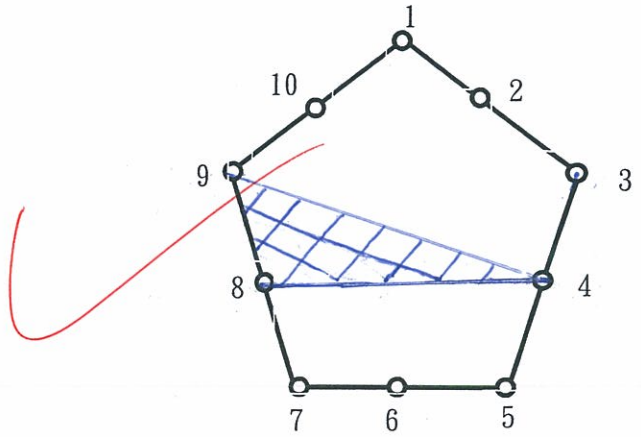
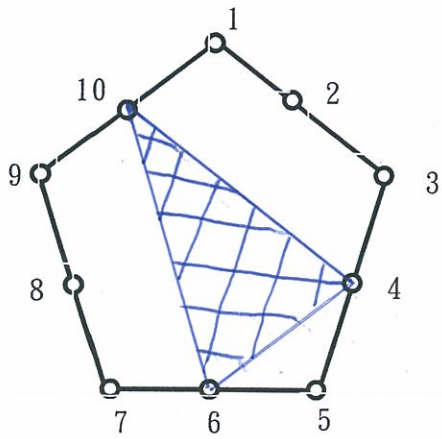
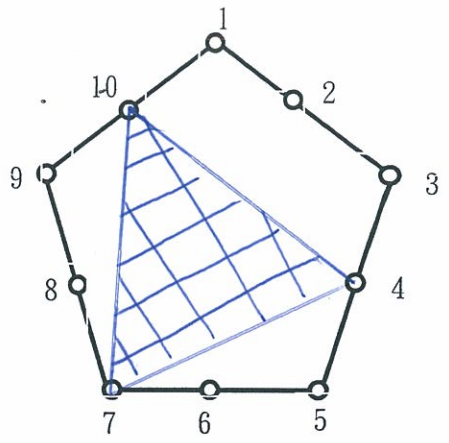
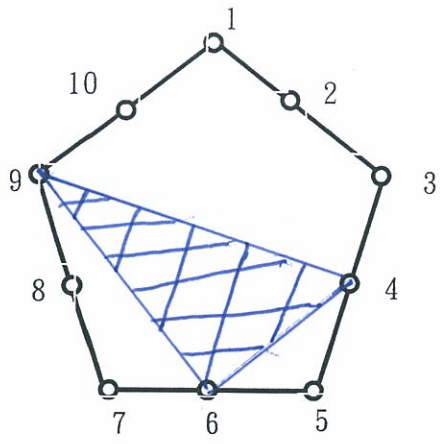
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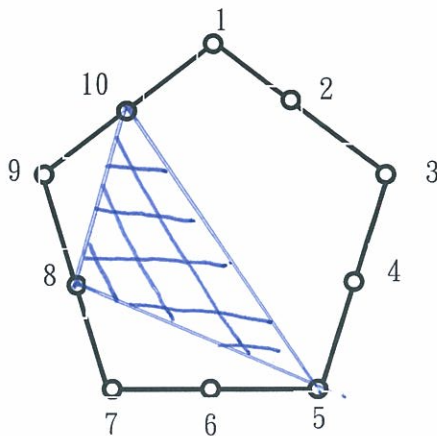
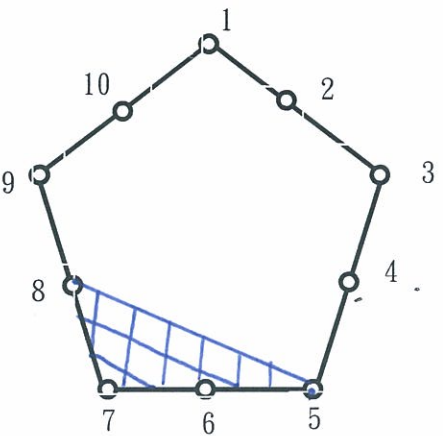
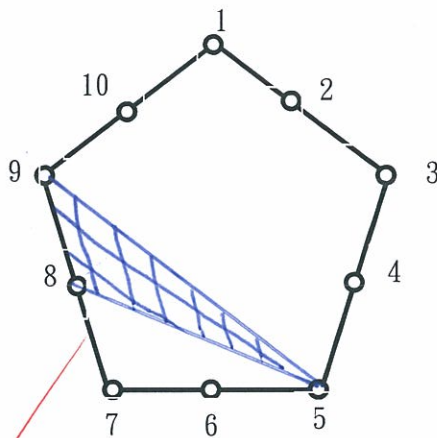
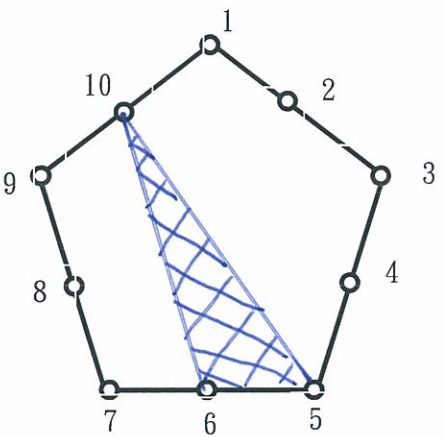
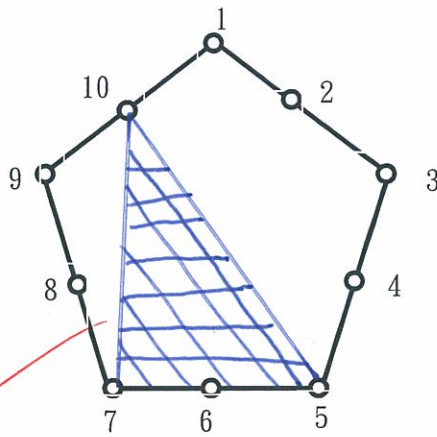
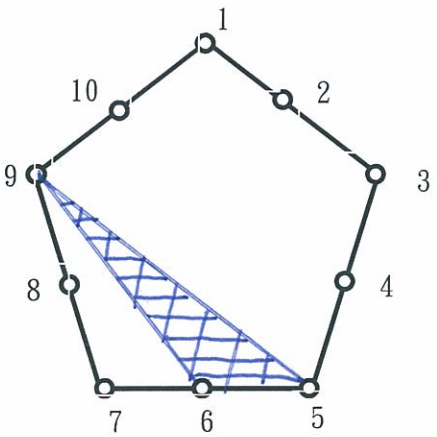
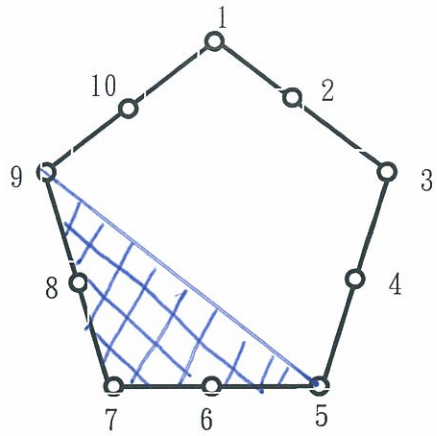
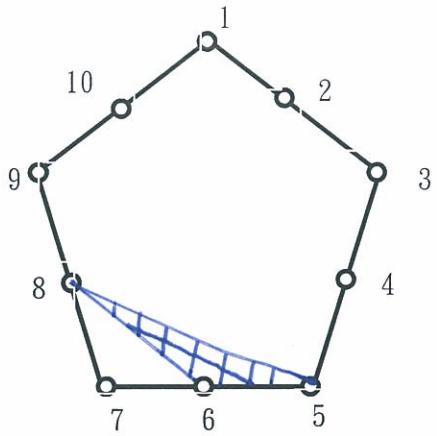
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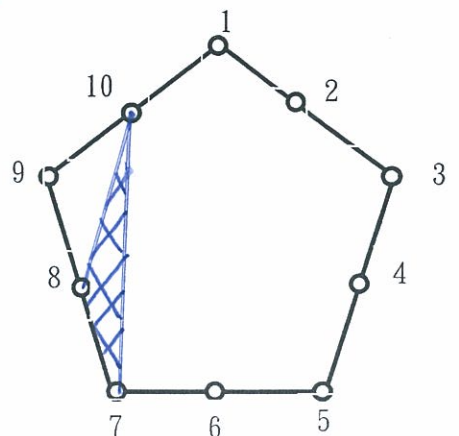
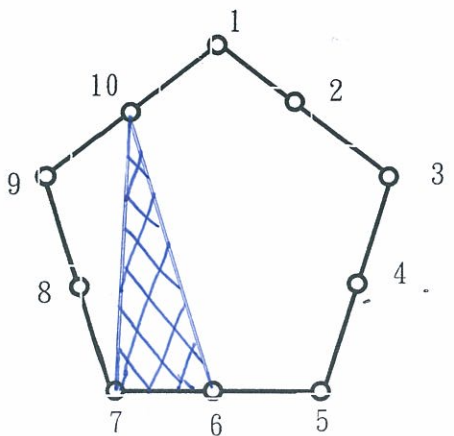
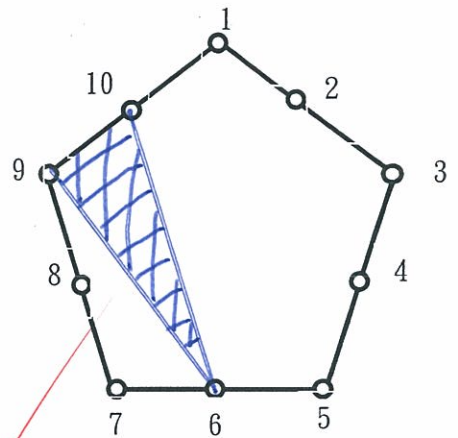
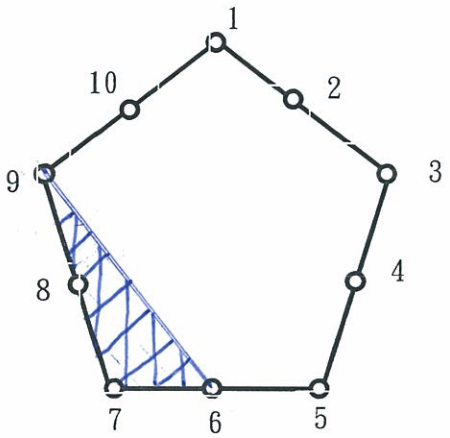
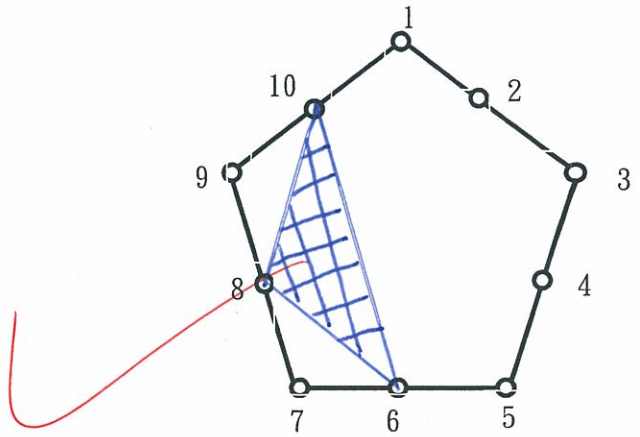
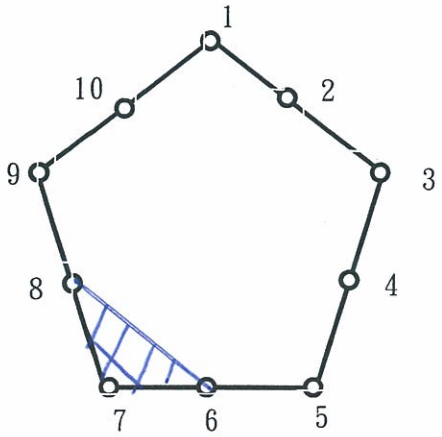
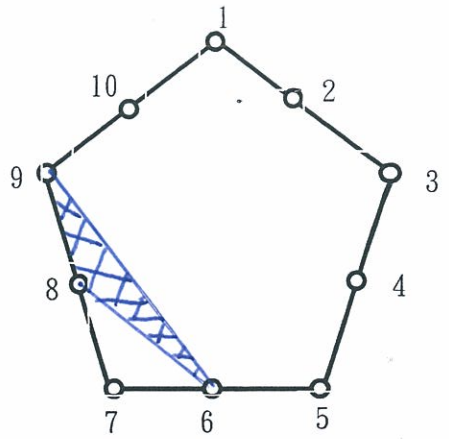
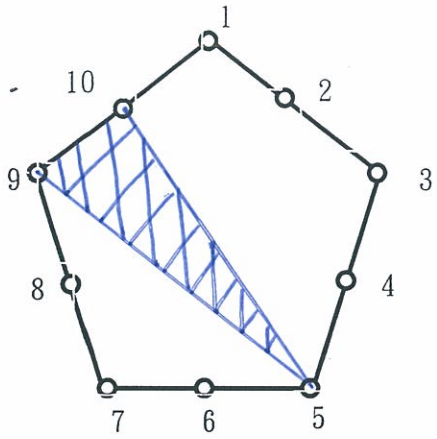
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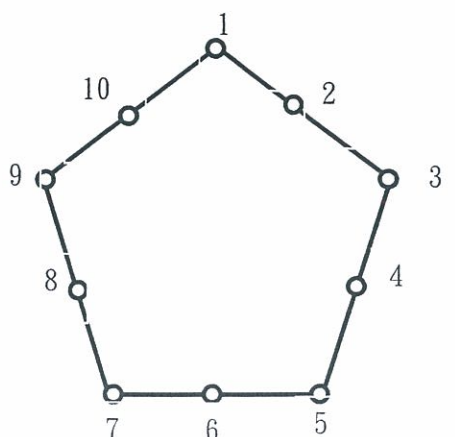
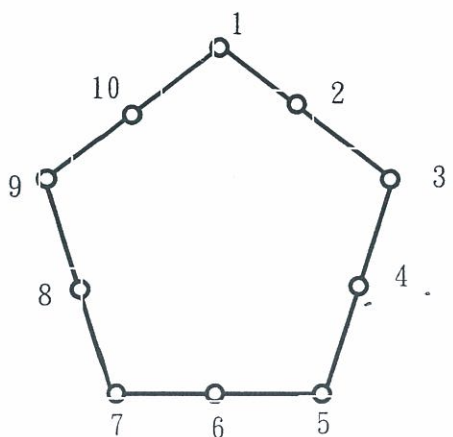
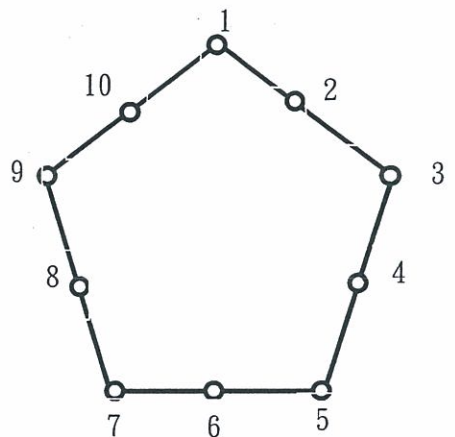
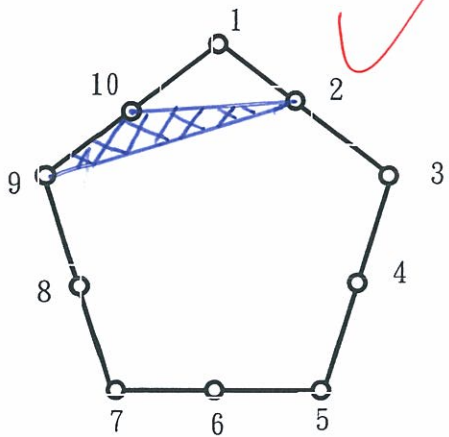
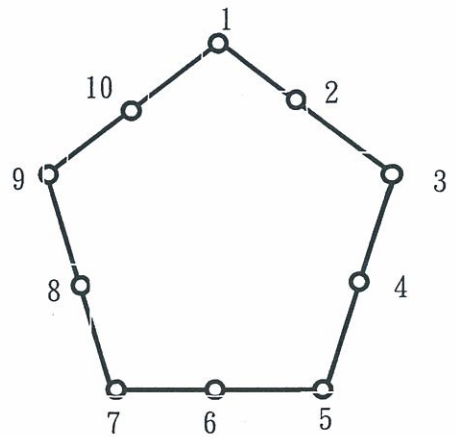
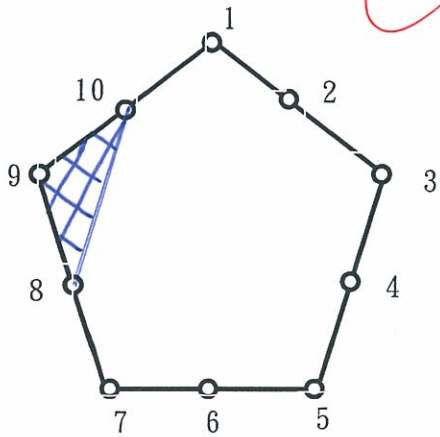
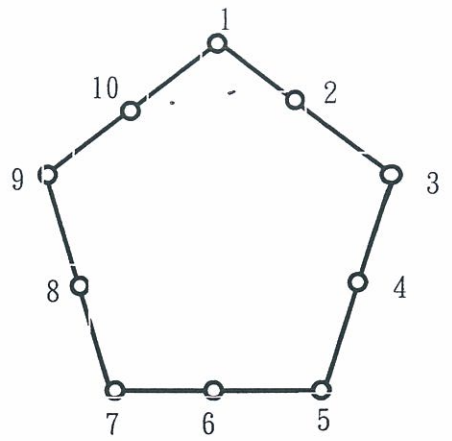
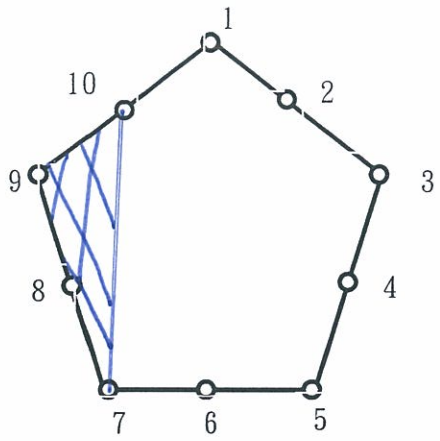
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