

Answer key

1 Alphametics

1. [4 points]

$$\begin{array}{r}
 \text{DOG} \\
 + \text{LOG} \\
 \hline
 \text{GOOD}
 \end{array}$$

$$\begin{array}{r}
 \boxed{2} \boxed{0} \boxed{1} \\
 + \boxed{8} \boxed{0} \boxed{1} \\
 \hline
 \boxed{1} \boxed{0} \boxed{0} \boxed{2}
 \end{array}$$

2. [7 points]

$$\begin{array}{r}
 \text{UN} \\
 \text{UN} \\
 + \text{NEUF} \\
 \hline
 \text{ONZE}
 \end{array}$$

$$\begin{array}{r}
 \boxed{8} \boxed{1} \\
 \boxed{8} \boxed{1} \\
 + \boxed{1} \boxed{9} \boxed{8} \boxed{7} \\
 \hline
 \boxed{2} \boxed{1} \boxed{4} \boxed{9}
 \end{array}$$

3. [10 points]

$$\begin{array}{r}
 \text{STEVE} \\
 + \text{STEVE} \\
 \hline
 \text{APPLES}
 \end{array}$$

$$\begin{array}{r}
 \boxed{8} \boxed{3} \boxed{4} \boxed{7} \boxed{4} \\
 + \boxed{8} \boxed{3} \boxed{4} \boxed{7} \boxed{4} \\
 \hline
 \boxed{1} \boxed{6} \boxed{6} \boxed{9} \boxed{4} \boxed{8}
 \end{array}$$

Answer key

4. [13 points]

$$\begin{array}{r}
 \text{COMPLEX} \\
 + \text{LAPLACE} \\
 \hline
 \text{CALCULUS}
 \end{array}$$

$$\begin{array}{r}
 \boxed{1} \boxed{8} \boxed{6} \boxed{4} \boxed{9} \boxed{2} \boxed{5} \\
 + \boxed{9} \boxed{0} \boxed{4} \boxed{9} \boxed{0} \boxed{1} \boxed{2} \\
 \hline
 \boxed{1} \boxed{0} \boxed{9} \boxed{1} \boxed{3} \boxed{9} \boxed{3} \boxed{7}
 \end{array}$$

5. [16 points]

$$\begin{array}{r}
 \text{BEARLIKE} \\
 \text{YELLOW} \\
 + \text{BEAR} \\
 \hline
 \text{BERKELEY}
 \end{array}$$

$$\begin{array}{r}
 \boxed{9} \boxed{2} \boxed{3} \boxed{4} \boxed{6} \boxed{7} \boxed{8} \boxed{2} \\
 \boxed{1} \boxed{2} \boxed{6} \boxed{6} \boxed{0} \boxed{5} \\
 + \boxed{9} \boxed{2} \boxed{3} \boxed{4} \\
 \hline
 \boxed{9} \boxed{2} \boxed{4} \boxed{8} \boxed{2} \boxed{6} \boxed{2} \boxed{1}
 \end{array}$$

Answer key

2 ABC

1. [4 points]

		C		
B		B	C	A
	C	A		B
	A		B	C
	B	C	A	
				A
				C

use letters
A, B, C

2. [7 points]

			A	A
	C	B		A
	B		A	C
A	A	C	B	
		A	C	B
			C	B

use letters
A, B, C

3. [10 points]

			A	A	A
D	D	C		B	
		B		D	A
		D	A		C
	A		C		B
	C		B	A	D
	B	A	D	C	
		A		D	D

use letters
A, B, C, D

Answer key

4. [13 points]

			B	B	
	C	A	B		
C			C	B	A
C		C	A		B
A	A	B		C	
	B			A	C
			B	A	A

use letters
A, B, C

5. [16 points]

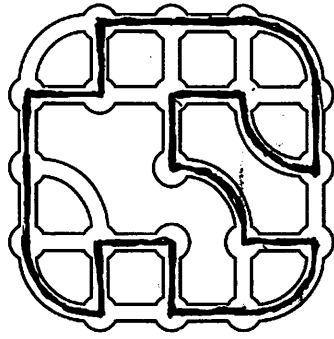
				B	E	A	D	E	D	
	B	E	A	D				C	F	F
D		D	F	C	E			B	A	A
A	A	F	E	B	C	D				D
B			B	F	A	C	D	E		E
	C			A	B	E	F	D		D
F	F	C	D	E		A		B		
E	E	B	C		D	F	A			A
D	D	A			F	B	E	C		
				A	C	E		B	E	

use letters
A, B, C, D, E, F

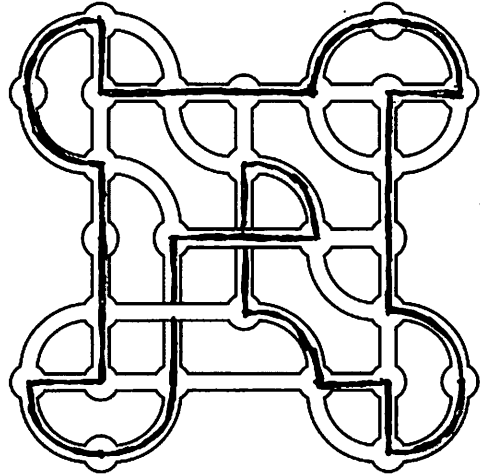
Answer key

3 Hamilton Maze

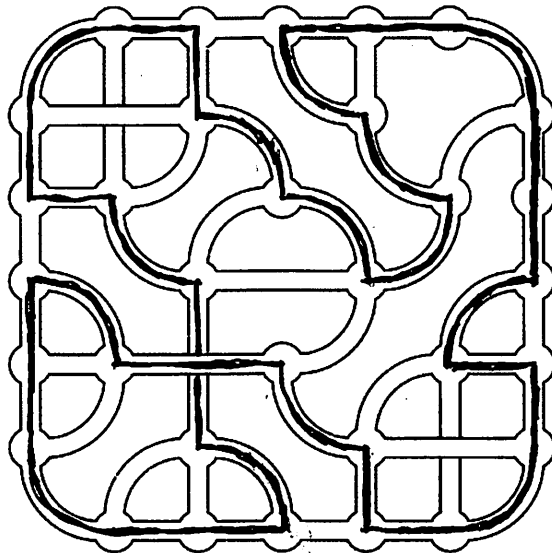
1. [4 points]



2. [7 points]

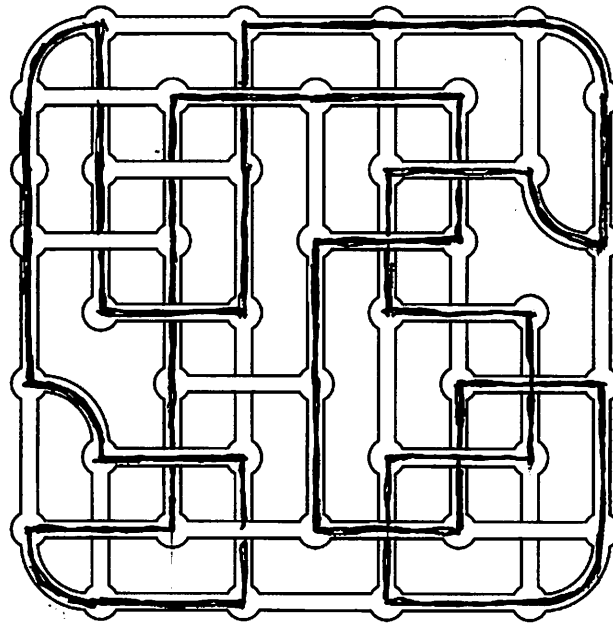


3. [10 points]

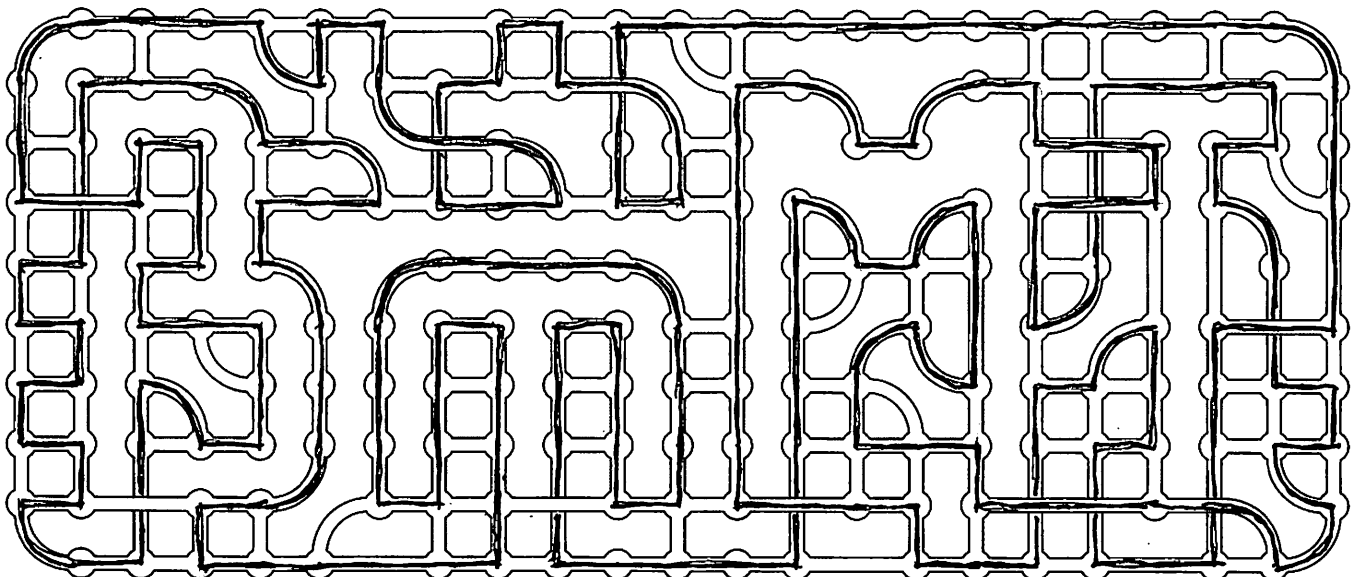


Answer key

4. [13 points]



5. [16 points]



this solution is not unique. If you are grading a solution to this puzzle that looks "complete" but does not match this exactly, check that every node is covered and the line drawn is one complete loop.