

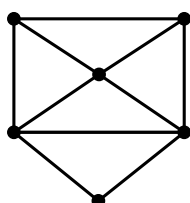
If you can copy a network

- without lifting your pen off the paper
- without drawing any line twice

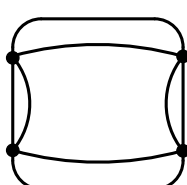
then it is traversable.

Decide which of these diagrams are traversable.

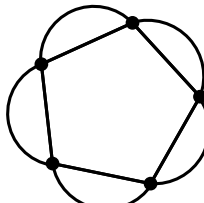
1.



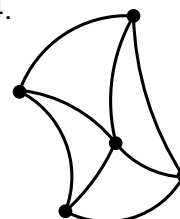
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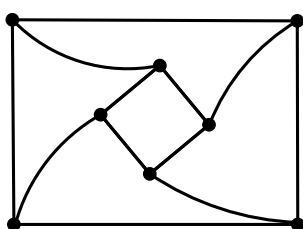
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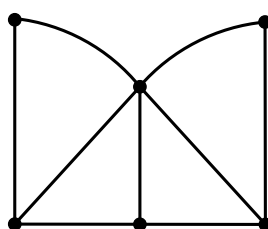
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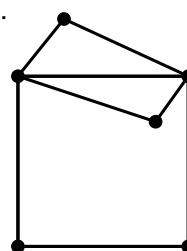
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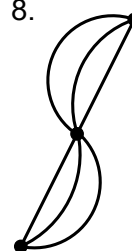
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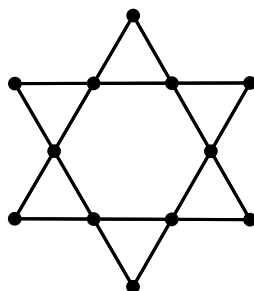
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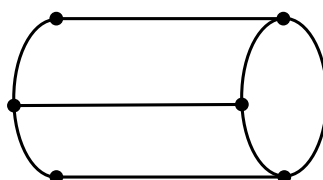
8.



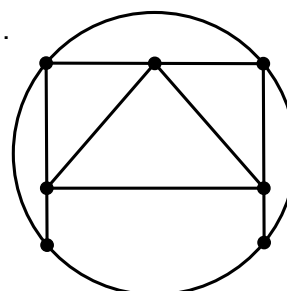
9.



10.



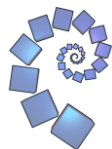
11.



If you end up where you started when you draw a traversable diagram it is called a traversing circuit.

If you don't end up where you started when you draw a traversable diagram it is called a traversing path.

Can you give a set of criteria for determining whether a diagram is traversable by a path or a circuit or neither?

**A related problem?**

If you make a chain with all 28 dominoes so that adjacent ends of dominoes match, and it has 5 spots at one end, how many spots will it have at the other end? And if it has a different number of spots at one end?

Can you explain your results?