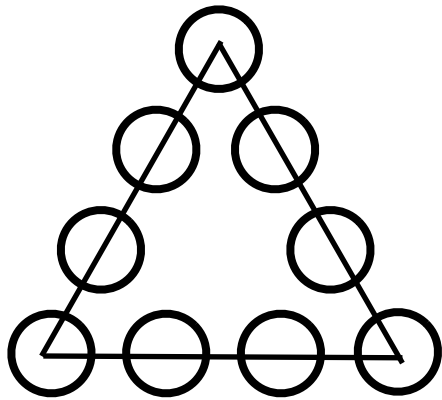
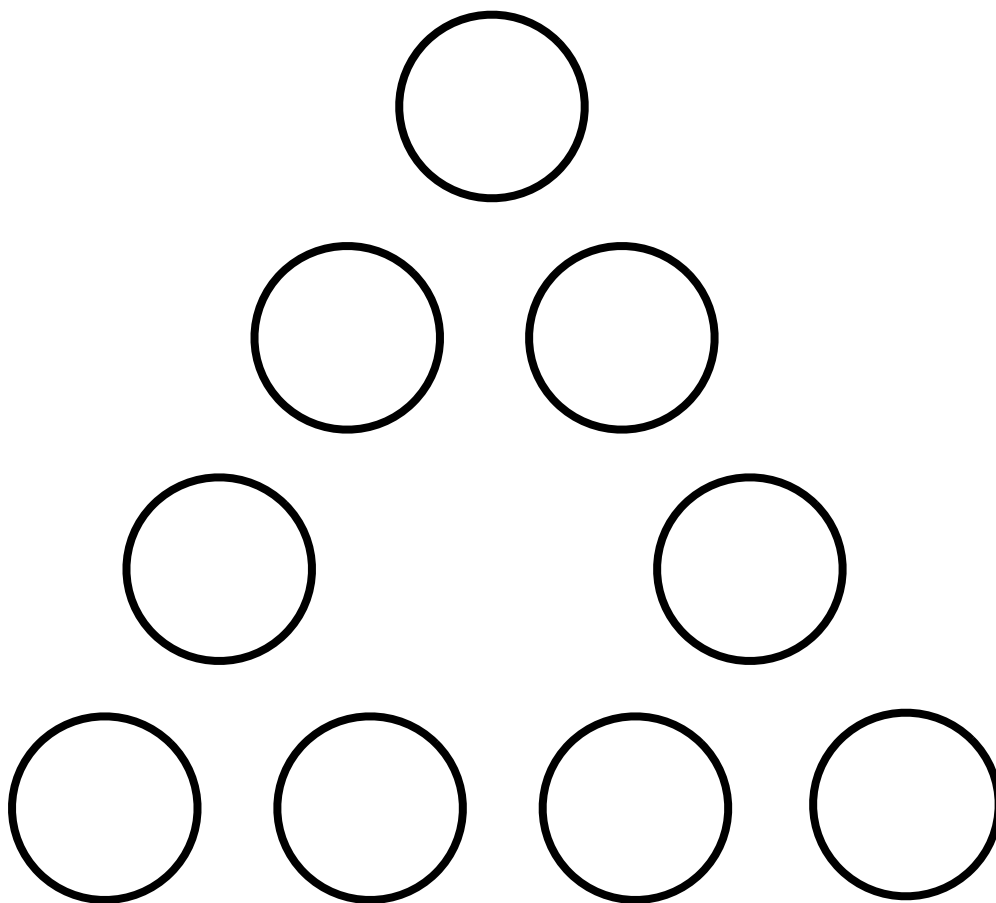
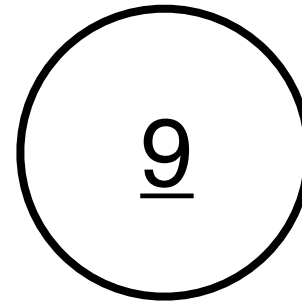
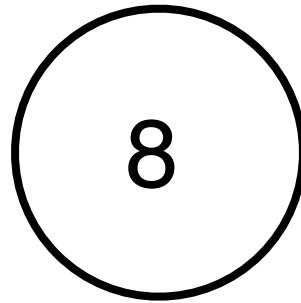
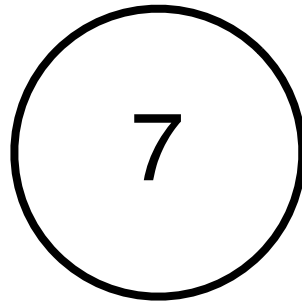
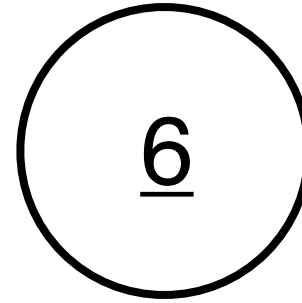
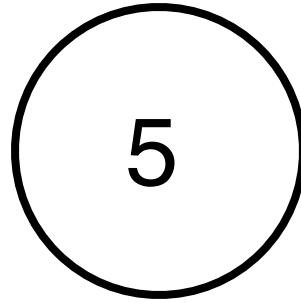
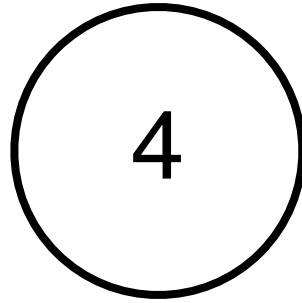
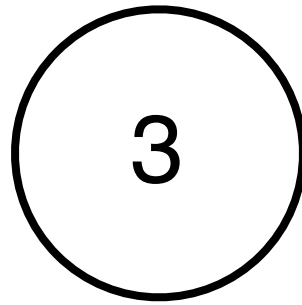
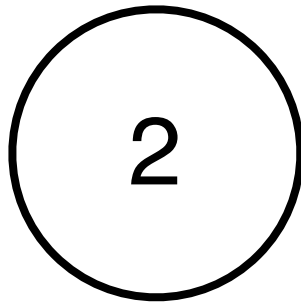
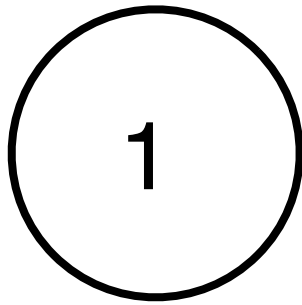


Perimeter Magic Triangles Sum to 17

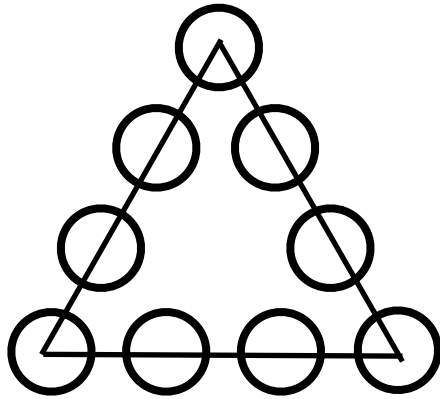


Arrange the numbers 1 to 9
in the triangles
so that the numbers
in each row of 4 triangles
have a **Sum of 17**

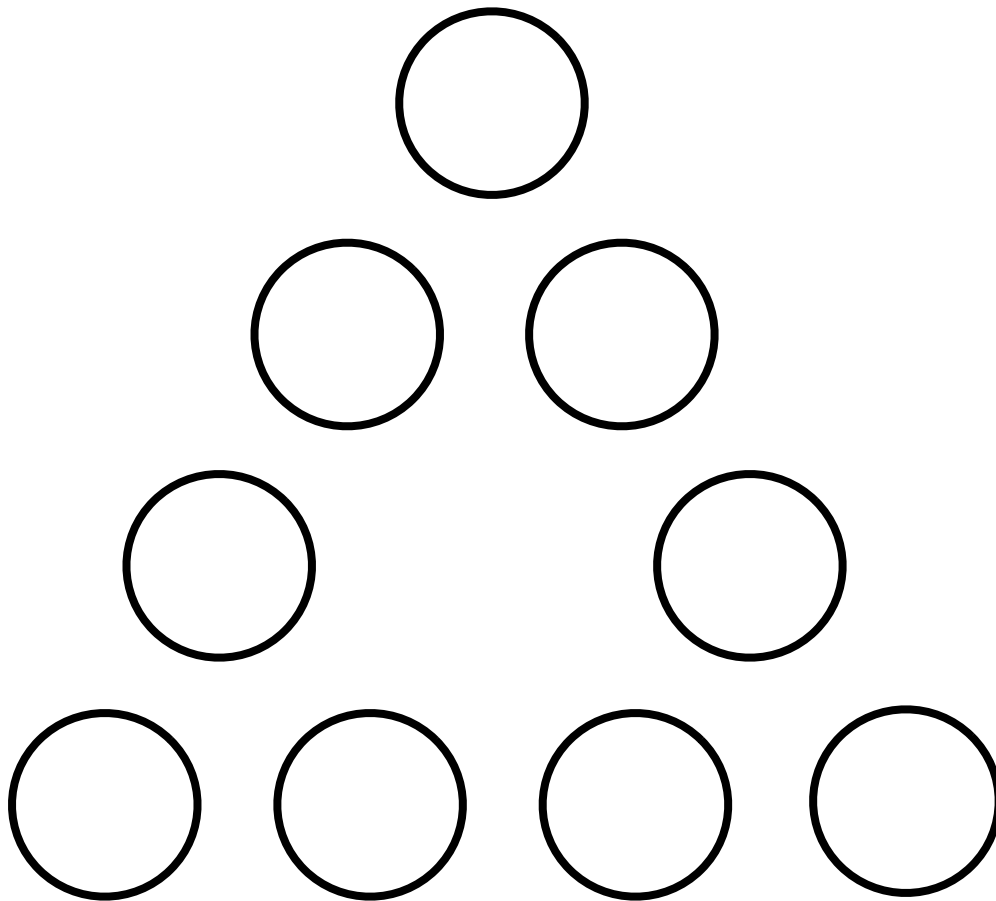




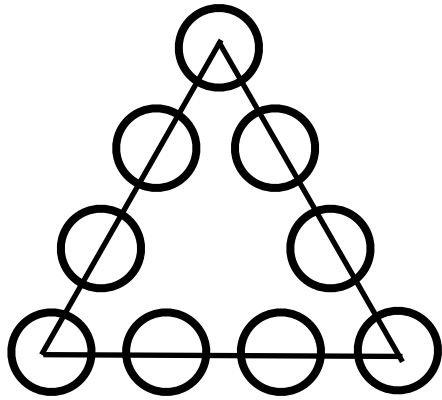
Perimeter Magic Triangles Sum to 19



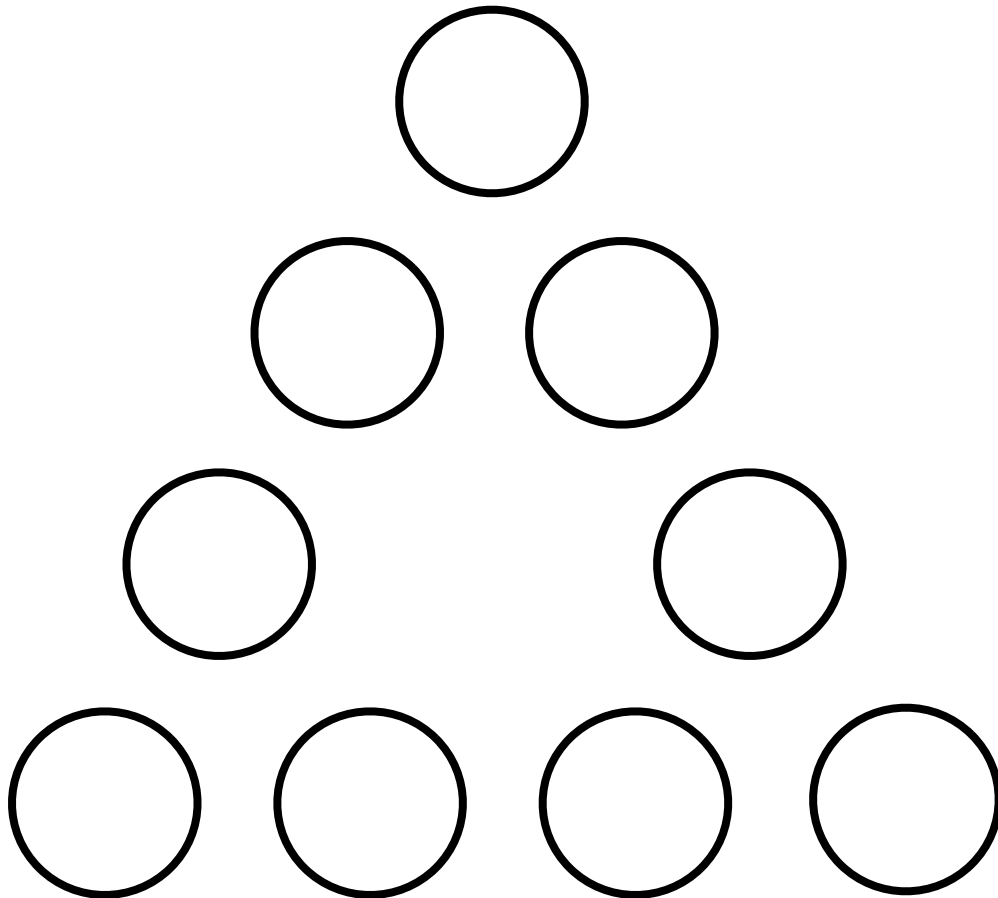
Arrange the numbers 1 to 9
in the triangles
so that the numbers
in each row of 4 triangles
have a **Sum of 19**



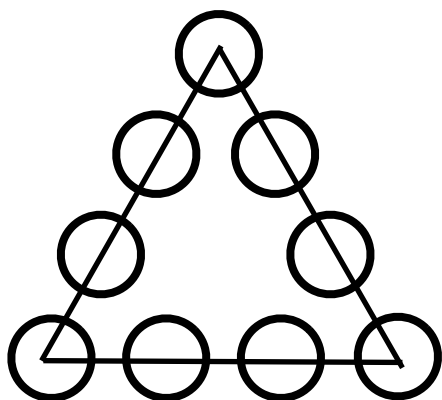
Perimeter Magic Triangles Sum to 20



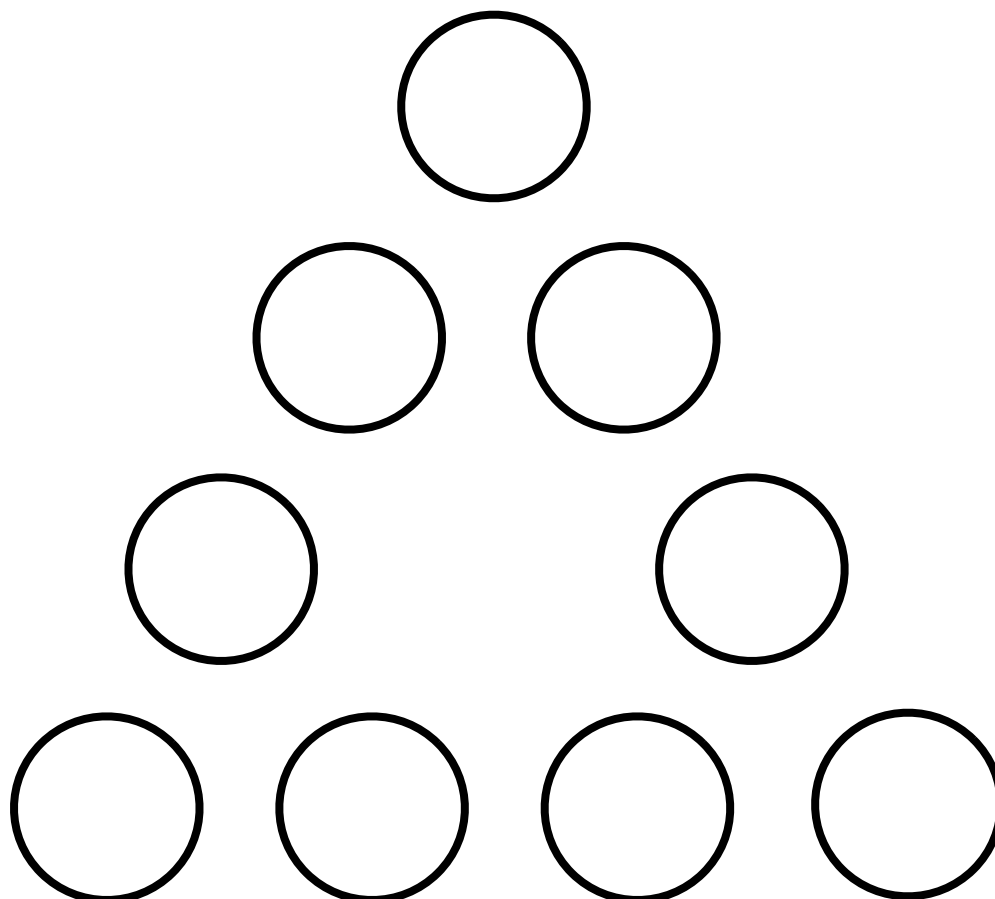
Arrange the numbers 1 to 9
in the triangles
so that the numbers
in each row of 4 triangles
have a **Sum of 20**



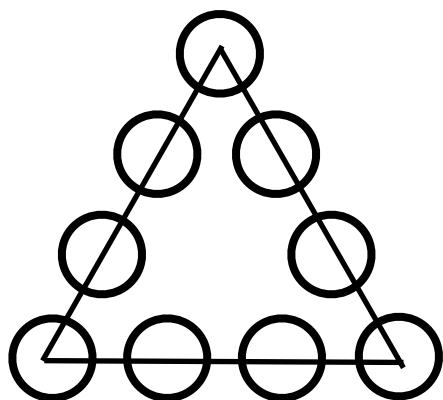
Perimeter Magic Triangles Sum to 21



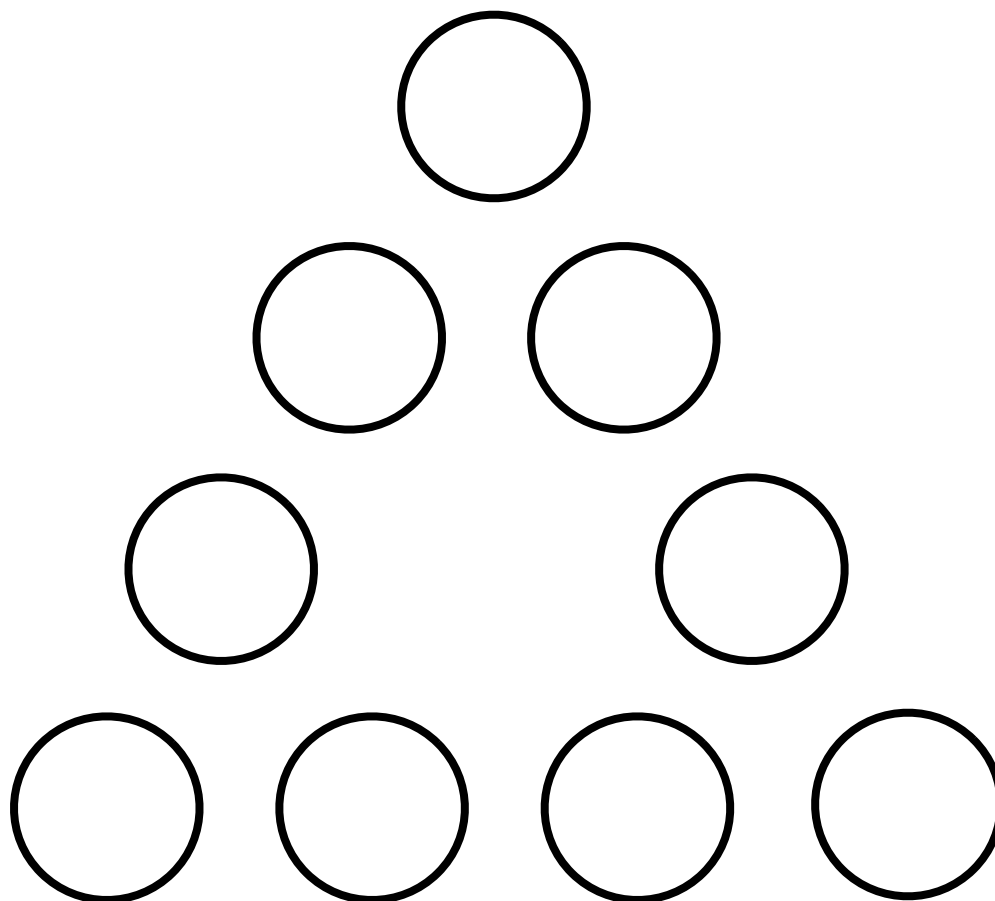
Arrange the numbers 1 to 9
in the triangles
so that the numbers
in each row of 4 triangles
have a **Sum of 21**



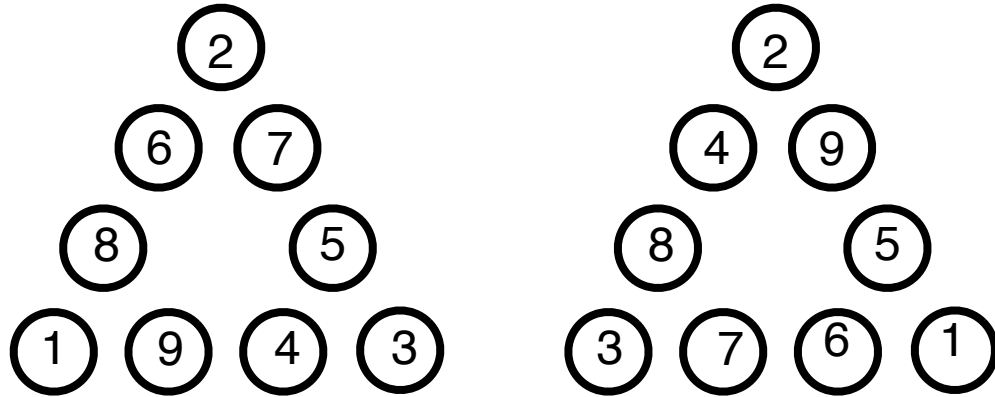
Perimeter Magic Triangles Sum to 23



Arrange the numbers 1 to 9
in the triangles
so that the numbers
in each row of 4 triangles
have a **Sum of 23**



Perimeter Magic Triangles Sum to 17 solutions

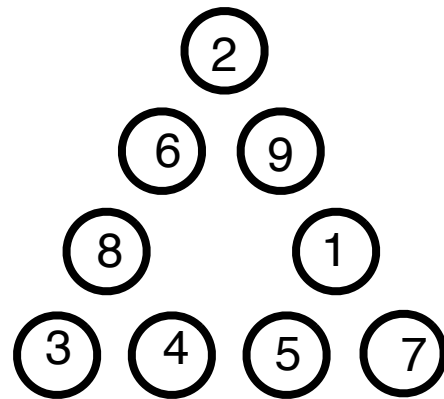
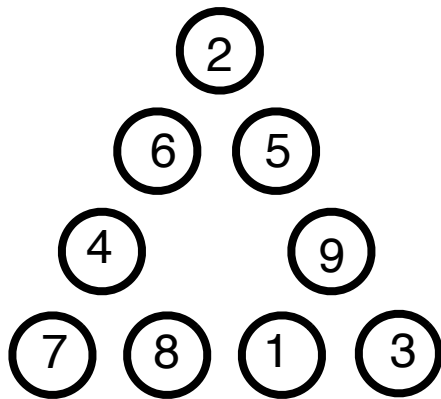
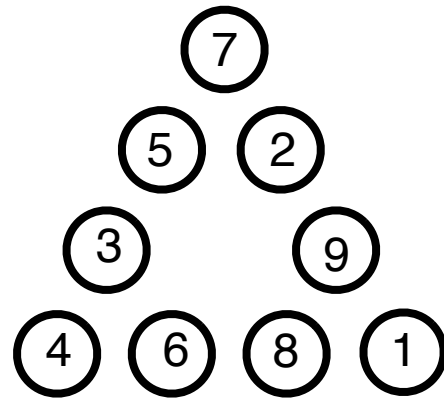
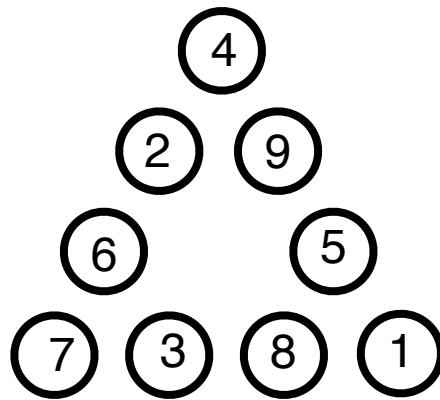


Each group of four numbers makes up a side of the triangle. The numbers that are at the ends and bolded go in the vertex. Within a side you can switch the other 2 numbers that aren't on a vertex, but that doesn't produce any new solutions.

$$17 = \mathbf{1} + 5 + 9 + \mathbf{2} = \mathbf{2} + 4 + 8 + \mathbf{3} = \mathbf{3} + 6 + 7 + \mathbf{1}$$

$$17 = \mathbf{1} + 6 + 8 + \mathbf{2} = \mathbf{2} + 5 + 7 + \mathbf{3} = \mathbf{3} + 4 + 9 + \mathbf{1}$$

Perimeter Magic Triangles Sum to 19 solutions



Each group of four numbers makes up a side of the triangle. The numbers that are at the ends and bolded go in the vertex. Within a side you can switch the other 2 numbers that aren't on a vertex, but that doesn't give any new solutions.

$$19 = \mathbf{1} + 5 + 9 + \mathbf{4} = \mathbf{4} + 2 + 6 + \mathbf{7} = \mathbf{7} + 3 + 8 + \mathbf{1}$$

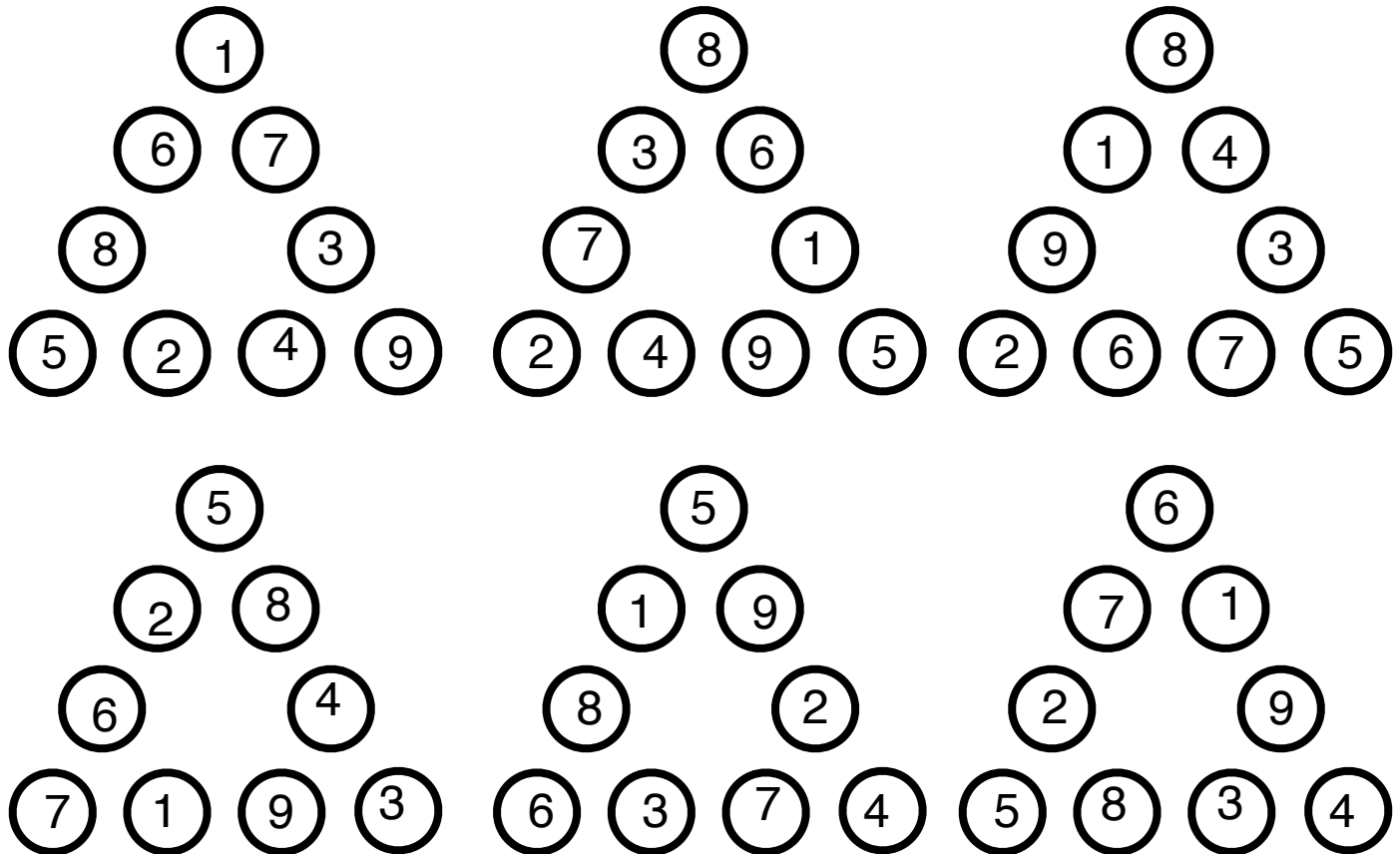
$$19 = \mathbf{1} + 6 + 8 + \mathbf{4} = \mathbf{4} + 3 + 5 + \mathbf{7} = \mathbf{7} + 2 + 9 + \mathbf{1}$$

$$19 = \mathbf{2} + 5 + 9 + \mathbf{3} = \mathbf{3} + 1 + 8 + \mathbf{7} = \mathbf{7} + 4 + 6 + \mathbf{2}$$

$$19 = \mathbf{2} + 6 + 8 + \mathbf{3} = \mathbf{3} + 4 + 5 + \mathbf{7} = \mathbf{7} + 1 + 9 + \mathbf{2}$$

Perimeter Magic Triangles Sum to 20 solutions

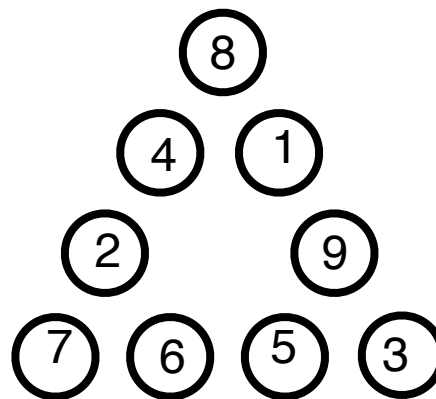
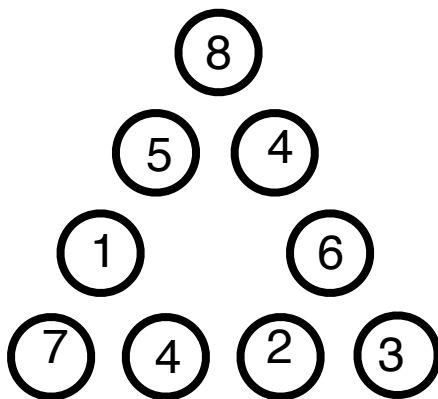
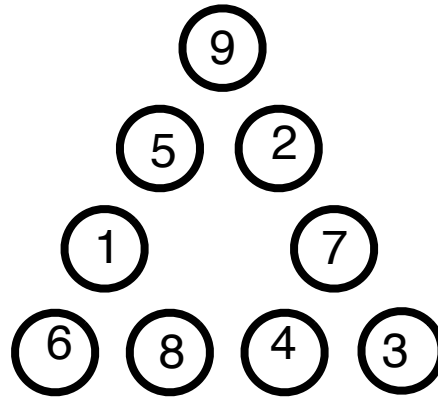
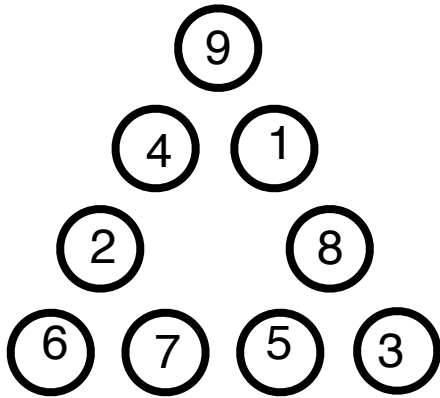
Each group of four numbers makes up a side of the triangle. The numbers that are at the ends and bolded go in the vertex. Within a side you can switch the other 2 numbers that aren't on a vertex, but that doesn't give any new solutions.



$$\begin{aligned}
 20 &= \mathbf{1} + 6 + 8 + \mathbf{5} = \mathbf{5} + 2 + 4 + \mathbf{9} = \mathbf{9} + 3 + 7 + \mathbf{1} \\
 20 &= \mathbf{2} + 4 + 9 + \mathbf{5} = \mathbf{5} + 1 + 6 + \mathbf{8} = \mathbf{8} + 3 + 7 + \mathbf{2} \\
 20 &= \mathbf{2} + 6 + 7 + \mathbf{5} = \mathbf{5} + 3 + 4 + \mathbf{8} = \mathbf{8} + 1 + 9 + \mathbf{2} \\
 20 &= \mathbf{3} + 4 + 8 + \mathbf{5} = \mathbf{5} + 2 + 6 + \mathbf{7} = \mathbf{7} + 1 + 9 + \mathbf{3} \\
 20 &= \mathbf{4} + 2 + 9 + \mathbf{5} = \mathbf{5} + 1 + 8 + \mathbf{6} = \mathbf{6} + 3 + 7 + \mathbf{4} \\
 20 &= \mathbf{4} + 3 + 8 + \mathbf{5} = \mathbf{5} + 2 + 7 + \mathbf{6} = \mathbf{6} + 1 + 9 + \mathbf{4}
 \end{aligned}$$

Perimeter Magic Triangles Sum to 21 solutions

Each group of four numbers makes up a side of the triangle. The numbers that are at the ends and bolded go in the vertex. Within a side you can switch the other 2 numbers that aren't on a vertex, but that doesn't give any new solutions.



$$21 = \mathbf{3} + 5 + 7 + \mathbf{6} = \mathbf{6} + 2 + 4 + \mathbf{9} = \mathbf{9} + 1 + 8 + \mathbf{3}$$

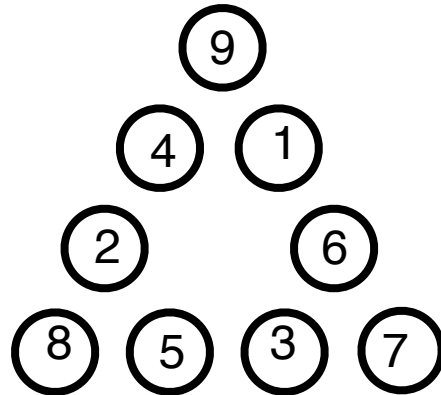
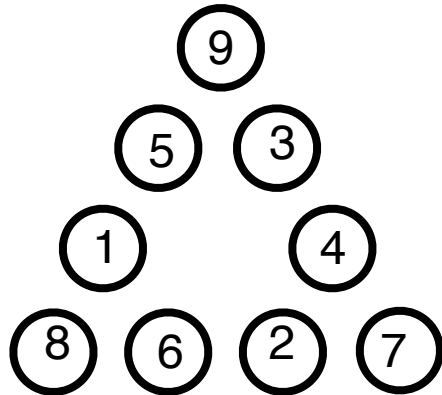
$$21 = \mathbf{3} + 4 + 8 + \mathbf{6} = \mathbf{6} + 1 + 5 + \mathbf{9} = \mathbf{9} + 2 + 7 + \mathbf{3}$$

$$21 = \mathbf{3} + 2 + 9 + \mathbf{7} = \mathbf{7} + 1 + 5 + \mathbf{8} = \mathbf{8} + 4 + 6 + \mathbf{3}$$

$$21 = \mathbf{3} + 5 + 6 + \mathbf{7} = \mathbf{7} + 2 + 4 + \mathbf{8} = \mathbf{8} + 1 + 9 + \mathbf{3}$$

Perimeter Magic Triangles Sum to 23 solutions

Each group of four numbers makes up a side of the triangle. The numbers that are at the ends and bolded go in the vertex. Within a side you can switch the other 2 numbers that aren't on a vertex, but that doesn't give any new solutions.



$$23 = \mathbf{7} + 2 + 6 + \mathbf{8} = \mathbf{8} + 1 + 5 + \mathbf{9} = \mathbf{9} + 3 + 4 + \mathbf{7}$$

$$23 = \mathbf{7} + 3 + 5 + \mathbf{8} = \mathbf{8} + 2 + 4 + \mathbf{9} = \mathbf{9} + 1 + 6 + \mathbf{7}$$