

NAME: _____

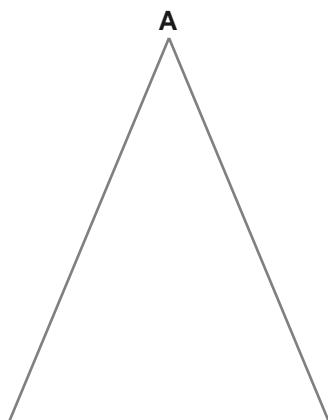
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TEACHER: _____

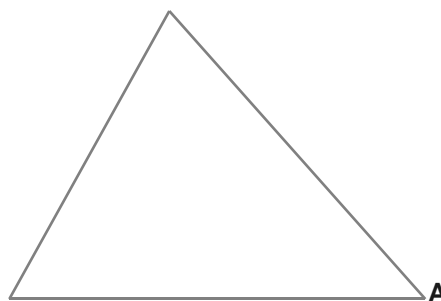
Altitudes of Triangles Constructions Worksheet (3)

Construct the altitude from vertex A.

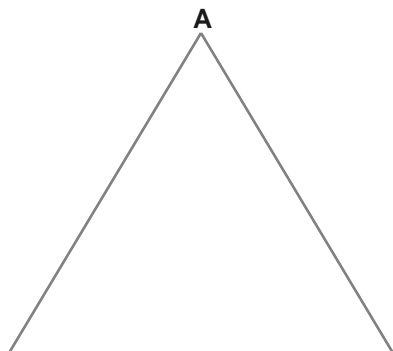
1)



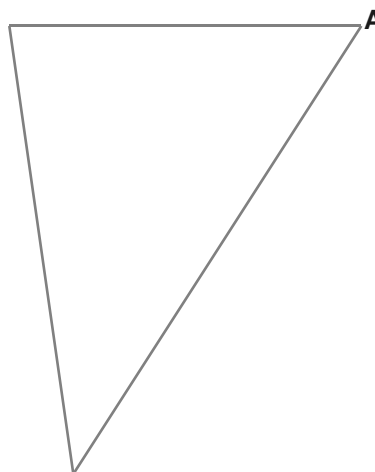
2)



3)



4)



NAME: _____

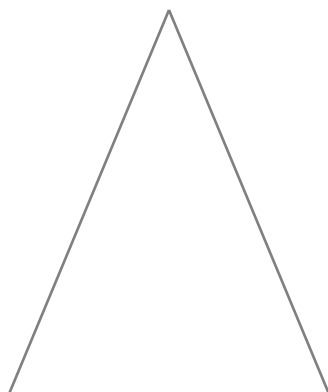
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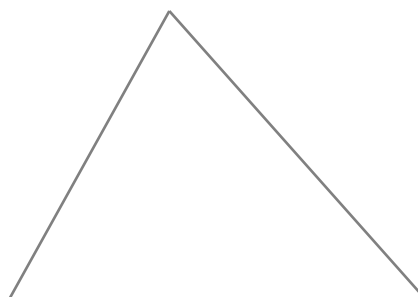
Altitudes of Triangles Constructions Worksheet (3)

Locate the orthocenter of each triangle.

5)

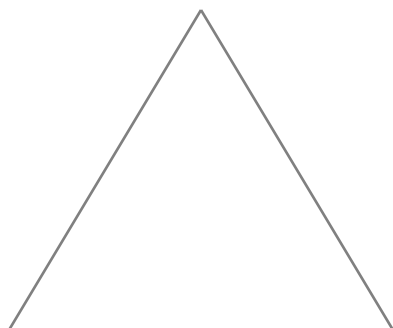


6)

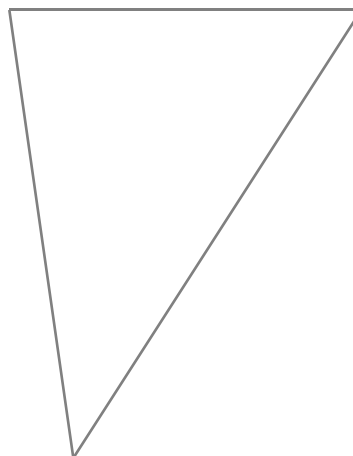


For each triangle, construct all three altitudes to show they are concurrent.

7)



8)



Altitudes of Triangles Constructions Worksheet (3)

How to construct an altitude:

Extend the line of the side opposing the vertex, and line up the span of the compass to any point on this side.

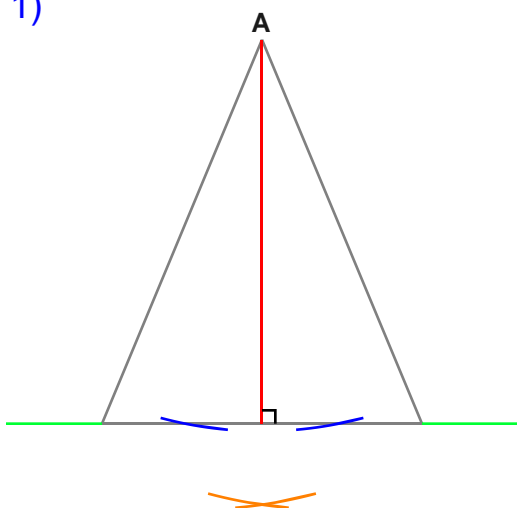
Rotating the compass, make two marks where the span of the compass intersects the side opposing the vertex.

At each of the two marks that intersect the side, using any span on the compass, rotate the compass outwards.

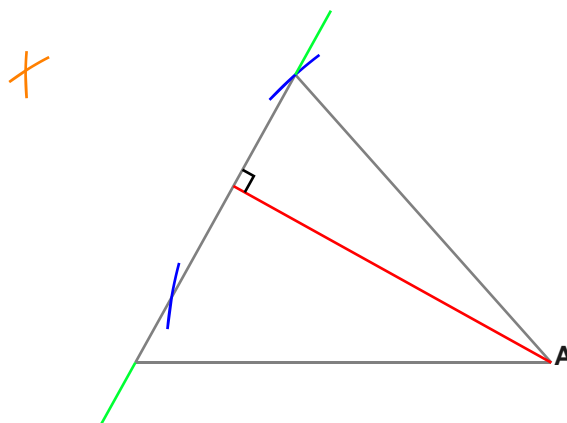
Line up a ruler from vertex A through where the outer arcs meet. Draw a line from A to the opposing side.

Construct the altitude from vertex A.

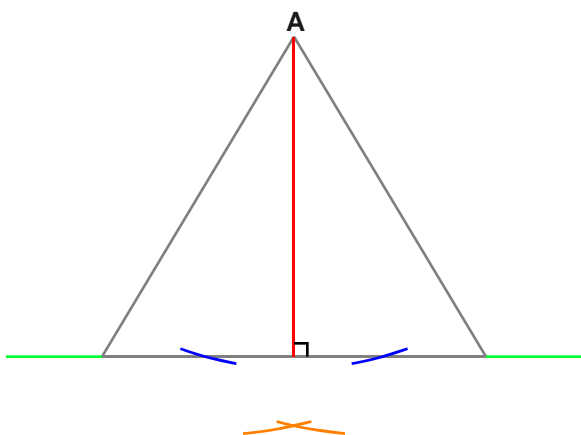
1)



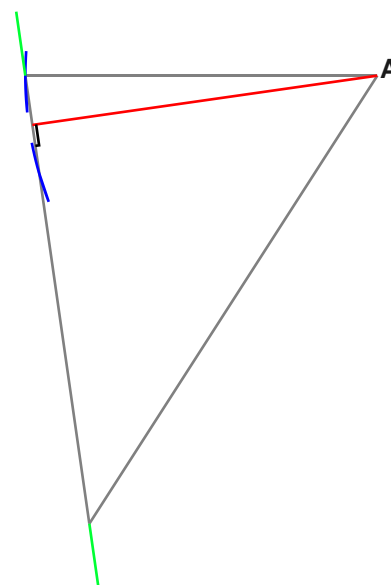
2)



3)



4)



Altitudes of Triangles Constructions Worksheet (3)

How to construct an altitude from any vertex:

Extend the line of the side opposing a vertex, and line up the span of the compass to any point on this side.

Rotating the compass, make two marks where the span of the compass intersects the side opposing the vertex.

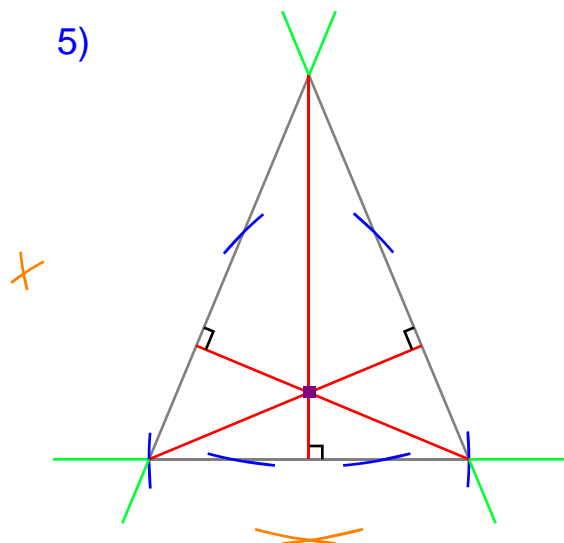
At each of the two marks that intersect the side, using any span on the compass, rotate the compass outwards.

Line up a ruler from a vertex through where the outer arcs meet. Draw a line from the vertex to the opposing side.

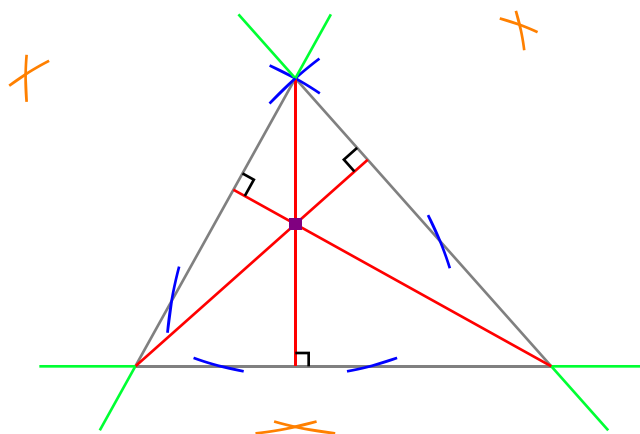
Repeat for the other vertices and plot the point where all three altitudes meet. This is the orthocenter/concurrence point.

Locate the orthocenter of each triangle.

5)

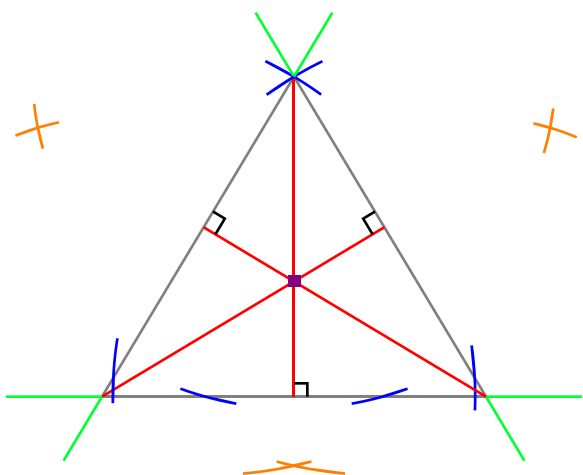


6)



For each triangle, construct all three altitudes to show they are concurrent.

7)



8)

