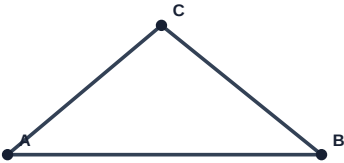


Construct Triangle Altitudes

Construct the perpendicular from the named vertex to the opposite supporting line.

Compass and straightedge workspace

1. In triangle ABC, construct the altitude from C to supporting line AB.



WORKSPACE

2. In triangle STU, construct the altitude from U to supporting line ST.



WORKSPACE

3. In triangle STU, construct the altitude from U to supporting line ST.



WORKSPACE

4. In triangle ABC, construct the altitude from C to supporting line AB.



WORKSPACE

Construct Triangle Altitudes

Construction Answer Key

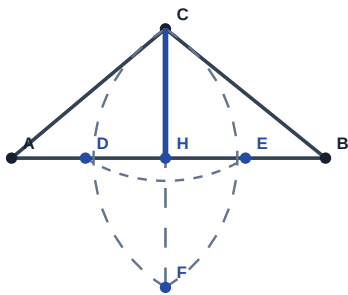
Construct the perpendicular from the named vertex to the opposite supporting line.

Solutions and compass marks

1.

In triangle ABC, construct the altitude from C to supporting line AB.

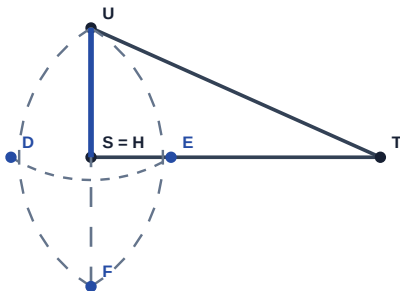
1. If needed, extend side AB as a supporting line.
2. With center C, draw an arc meeting the supporting line at D and E.
3. From D and E, draw equal arcs that meet at F on the opposite side of the line.
4. Draw line CF. Its intersection H with AB is the altitude foot.



2.

In triangle STU, construct the altitude from U to supporting line ST.

1. If needed, extend side ST as a supporting line.
2. With center U, draw an arc meeting the supporting line at D and E.
3. From D and E, draw equal arcs that meet at F on the opposite side of the line.
4. Draw line UF. Its intersection H with ST is the altitude foot.



Construct Triangle Altitudes

Construction Answer Key

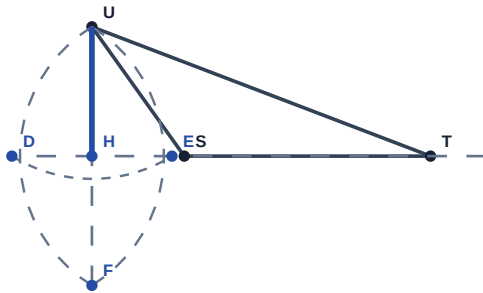
Construct the perpendicular from the named vertex to the opposite supporting line.

Solutions and compass marks

3.

In triangle STU, construct the altitude from U to supporting line ST.

1. If needed, extend side ST as a supporting line.
2. With center U, draw an arc meeting the supporting line at D and E.
3. From D and E, draw equal arcs that meet at F on the opposite side of the line.
4. Draw line UF. Its intersection H with ST is the altitude foot.



4.

In triangle ABC, construct the altitude from C to supporting line AB.

1. If needed, extend side AB as a supporting line.
2. With center C, draw an arc meeting the supporting line at D and E.
3. From D and E, draw equal arcs that meet at F on the opposite side of the line.
4. Draw line CF. Its intersection H with AB is the altitude foot.

