

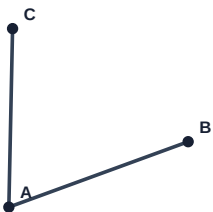
Construct Angle Bisectors

Bisect each marked angle with compass arcs, then draw the internal bisector.

Compass and straightedge workspace

1.

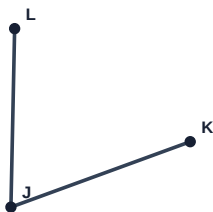
Construct the bisector of angle BAC.



WORKSPACE

2.

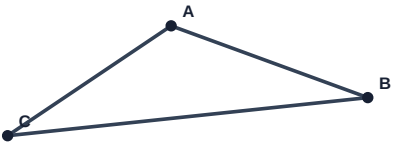
Construct the bisector of angle KJL.



WORKSPACE

3.

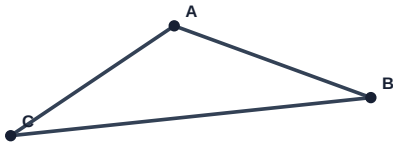
In triangle ABC, construct the internal bisector of angle A.



WORKSPACE

4.

In triangle ABC, construct the internal bisector of angle A.



WORKSPACE

Construct Angle Bisectors

Construction Answer Key

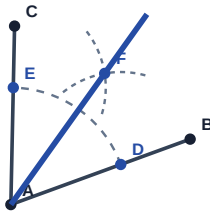
Bisect each marked angle with compass arcs, then draw the internal bisector.

Solutions and compass marks

1.

Construct the bisector of angle BAC.

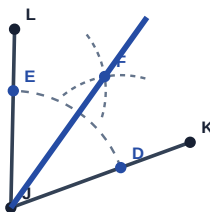
1. Draw an arc centered at A meeting the two sides at D and E.
2. Without changing the compass, draw equal arcs centered at D and E; label their interior intersection F.
3. Draw ray AF. Equal chords make the two new angles equal.



2.

Construct the bisector of angle KJL.

1. Draw an arc centered at J meeting the two sides at D and E.
2. Without changing the compass, draw equal arcs centered at D and E; label their interior intersection F.
3. Draw ray JF. Equal chords make the two new angles equal.



Construct Angle Bisectors

Construction Answer Key

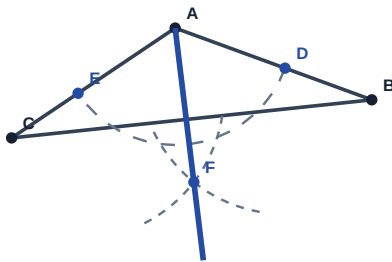
Bisect each marked angle with compass arcs, then draw the internal bisector.

Solutions and compass marks

3.

In triangle ABC, construct the internal bisector of angle A.

1. Draw an arc centered at A meeting the two sides at D and E.
2. Without changing the compass, draw equal arcs centered at D and E; label their interior intersection F.
3. Draw ray AF. Equal chords make the two new angles equal.



4.

In triangle ABC, construct the internal bisector of angle A.

1. Draw an arc centered at A meeting the two sides at D and E.
2. Without changing the compass, draw equal arcs centered at D and E; label their interior intersection F.
3. Draw ray AF. Equal chords make the two new angles equal.

