

Construct Circles

Transfer the supplied radius with a compass. For a diameter, construct its midpoint first.

Compass and straightedge workspace

1. Construct the circle centered at C with radius equal to segment AB.



WORKSPACE

2. Construct the circle whose diameter is segment ST.



WORKSPACE

3. Construct the circle centered at U with radius equal to segment ST.



WORKSPACE

4. Construct the circle whose diameter is segment AB.



WORKSPACE

Construct Circles

Construction Answer Key

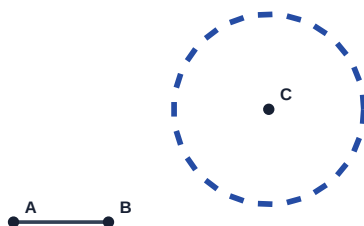
Transfer the supplied radius with a compass. For a diameter, construct its midpoint first.

Solutions and compass marks

1.

Construct the circle centered at C with radius equal to segment AB.

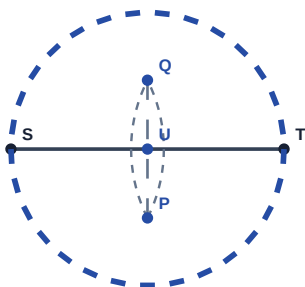
1. Set the compass opening exactly to AB.
2. Without changing it, place the compass point at C.
3. Draw the complete circle centered at C.



2.

Construct the circle whose diameter is segment ST.

1. Draw equal-radius arcs from S and T using a radius longer than half ST.
2. Join intersections P and Q; label its crossing with ST as center U.
3. Set the compass to US and draw the circle centered at U.



Construct Circles

Construction Answer Key

Transfer the supplied radius with a compass. For a diameter, construct its midpoint first.

Solutions and compass marks

3.

Construct the circle centered at U with radius equal to segment ST.

1. Set the compass opening exactly to ST.
2. Without changing it, place the compass point at U.
3. Draw the complete circle centered at U.



4.

Construct the circle whose diameter is segment AB.

1. Draw equal-radius arcs from A and B using a radius longer than half AB.
2. Join intersections P and Q; label its crossing with AB as center C.
3. Set the compass to CA and draw the circle centered at C.

