

Geometry – Constructions

Assignment #12

Complete all constructions on the class work handout on circumscribing and inscribing circles.

Choose three of the following types of problems (and complete all parts if there are multiple parts):

- Construct the following segment lengths:
 - Length 6
 - Length 10.5
 - Length 7.5
- Construct the following angle measures (remember to construct 60° and 90° and their bisectors to help):
 - Measure 15°
 - Measure 22.5°
 - Measure 37.5°
- Draw a line (name it line l), then place one point R on the line and another point Q **not** on the line.
 - Construct the line perpendicular to Line l and passing through Point R
 - Construct the line perpendicular to Line l and passing through Point Q
- Draw a line (name it line m), then place one point P above the line and another point Y below the line.
 - Construct the line parallel to Line l and passing through Point P
 - Construct the line parallel to Line l and passing through Point Y
- Draw a point X and draw a circle with center X ; then draw two extended radii \overline{XM} and \overline{XN}
 - Construct the line tangent to Circle X and passing through Point M
 - Construct the line tangent to Circle X and passing through Point N

Geometry – Constructions

Assignment #12

Complete all constructions on the class work handout on circumscribing and inscribing circles.

Choose three of the following types of problems (and complete all parts if there are multiple parts):

- Construct the following segment lengths:
 - Length 6
 - Length 10.5
 - Length 7.5
- Construct the following angle measures (remember to construct 60° and 90° and their bisectors to help):
 - Measure 15°
 - Measure 22.5°
 - Measure 37.5°
- Draw a line (name it line l), then place one point R on the line and another point Q **not** on the line.
 - Construct the line perpendicular to Line l and passing through Point R
 - Construct the line perpendicular to Line l and passing through Point Q
- Draw a line (name it line m), then place one point P above the line and another point Y below the line.
 - Construct the line parallel to Line l and passing through Point P
 - Construct the line parallel to Line l and passing through Point Y
- Draw a point X and draw a circle with center X ; then draw two extended radii \overline{XM} and \overline{XN}
 - Construct the line tangent to Circle X and passing through Point M
 - Construct the line tangent to Circle X and passing through Point N