**Activity 2.6.3a Construction Challenge**

Work with a partner to perform these constructions on Geogebra using only the straightedge and compass tools. Your may not have time to do all ten. Your teacher may suggest which constructions you and your partner should work on.

1. Construct a triangle congruent to a given triangle. (File act263#1.gbb)
2. Construct the ray that bisects a given angle. (File act263#2.gbb)
3. Construct the line perpendicular to a given line through a point on the line. (File act263#3.gbb)
4. Construct the line perpendicular to a given line through a point not on the line. (File act263#4.gbb)
5. Construct the perpendicular bisector of a segment. (File act263#5.gbb)
6. Construct an angle that is congruent to a given angle. (File act263#6.gbb)
7. Construct a line parallel to a given line through a point not on the line. (File act263#7.gbb)
8. Construct a square given the length of one side. (File act263#8.gbb)
9. Construct an angle measuring 30°. (File act263#9.gbb)
10. Construct an angle measuring 45°. (File act263#10.gbb)