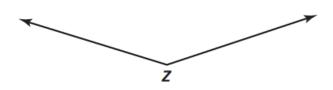
Constructions require a compass and a straightedge

1. Construct \overline{AB} congruent to \overline{XY} . Check your work with a ruler.



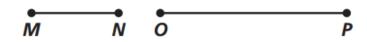
- 2. Construct the perpendicular bisector of \overline{XY} .
- 3. Construct a triangle whose sides are all the same length as \overline{XY} .

- **4.** Construct the angle bisector of $\angle Z$.
- Construct an isosceles triangle using segment XY twice and angle Z.



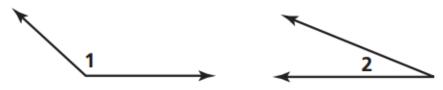
- a. Construct a 90° angle. Hint: start with a straight angle!
 - **b.** Construct a 45° angle.

Construct \overline{AB} so that AB = MN + OP.



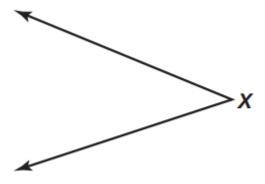
8. Construct \overline{KL} so that KL = OP - MN.

9. Construct $\angle A$ so that $m \angle A = m \angle 1 + m \angle 2$.



- **10.** Construct $\angle B$ so that $m \angle B = m \angle 1 m \angle 2$.
- **11.** Construct $\angle C$ so that $m \angle C = 2m \angle 2$.

12. Construct the angle bisector of $\angle X$.



Construct a triangle using angle 1, angle 2, and segment OP. What triangle congruence is being used?

Construct a triangle using segment XY, segment MN, and segment OP. What triangle congruence is being used?

Construct a triangle using angle X, Segment MN, and segment OP. What triangle congruence is being used?