Name: Period:

Construction Practice for Final Exam

## Constructions require a compass and a straightedge

1. Construct $\overline{A B}$ congruent to $\overline{X Y}$. Check your work with a ruler.

2. Construct the perpendicular bisector of $\overline{X Y}$.
3. Construct a triangle whose sides are all the same length as $\overline{X Y}$.
4. Construct the angle bisector of $\angle Z$.
5. Construct an isosceles triangle using segment $X Y$ twice and angle Z.

6. 

a. Construct a $90^{\circ}$ angle. Hint: start with a straight angle!
b. Construct a $45^{\circ}$ angle.
7. Construct $\overline{A B}$ so that $A B=M N+O P$.

8. Construct $\overline{K L}$ so that $K L=O P-M N$.
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 $m \angle C=2 m \angle 2$.
12. Construct the angle bisector of $\angle X$.
13. Construct a triangle using angle 1 , angle 2 , and segment $O P$. What triangle congruence is being used?
14. Construct a triangle using segment XY, segment MN, and segment OP. What triangle congruence is being used?
15. Construct a triangle using angle $X$, Segment MN, and segment OP. What triangle congruence is being used?

