$\qquad$ Class $\qquad$ Date $\qquad$

## Practice 1-5

## Construct each figure as directed.

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 $\angle Z$.


## Check your work with a protractor.

5. a. Construct a $90^{\circ}$ angle.
b. Construct a $45^{\circ}$ angle.
6. Construct $\overline{A B}$ so that $A B=M N+O P$.

7. Construct $\overline{K L}$ so that $K L=O P-M N$.
8. Construct $\angle A$ so that $m \angle A=m \angle 1+m \angle 2$.
9. Construct $\angle B$ so that $m \angle B=m \angle 1-m \angle 2$.

10. Construct $\angle C$ so that $m \angle C=2 m \angle 2$.
11. Construct the angle bisector of $\angle X$.
12. Construct $\angle W$ so that $m \angle W=2 m \angle X$.
13. Construct $\angle Z$ so that $m \angle Z=\frac{1}{2} m \angle X$.


## Write true or false.

14. $\overline{A B} \cong \overline{X Y}$


15. $m \angle 1=40$

16. If $m \angle A=80$, then $\angle A$ is obtuse.
17. The perpendicular bisector of a line segment creates four $90^{\circ}$ angles.
18. If $m \angle 1=45$ and $m \angle 2=m \angle 1$, then $m \angle 1+m \angle 2=90$.
19. For a given $\angle A, \frac{1}{2} \cdot m \angle A=2 \cdot m \angle A$.
20. If angles 3 and 4 are complementary and $m \angle 3=m \angle 4$, then $m \angle 4=45$.
