NAME: $\qquad$ DATE: $\qquad$ PERIOD: $\qquad$
For 1-3 refer to the figure on the right to name each of the following:

1. The angle: $\qquad$
2. The sides of the angle: $\qquad$
3. The vertex of the angle: $\qquad$


For \#4 - 10, refer to the figure to the right to name or classify angles as indicated.
4. Name $\angle 1$ : $\qquad$
5. Name $\angle 2$ : $\qquad$
6. Name $\angle 3$ : $\qquad$
7. Classify $\angle 2$ : $\qquad$
8. Classify $\angle 3$ : $\qquad$

9. Classify $\angle \mathrm{ABD}$ : $\qquad$
10. Classify $\angle A B F$ : $\qquad$

For \#11-13 use the Angle Addition Postulate to set up equations and solve $\boldsymbol{x}$.
11. $m \angle S X T=(4 x+1)^{\circ}, m \angle Q X S=(2 x-2)^{\circ}$ and $m \angle Q X T=125^{\circ}$.

Find the value of $\boldsymbol{x}$ and $\mathbf{m} \angle \mathbf{Q X S}$.

$X=$ $\qquad$
$\mathrm{m} \angle \mathrm{QXS}=$ $\qquad$
12. $\mathbf{m} \angle \mathbf{R X Q}=(x+7)^{\circ}, \mathbf{m} \angle \mathbf{Q X S}=(7 x+3)^{\circ}$ and $\mathbf{m} \angle \mathbf{R X S}=(11 x-8)^{\circ}$.

Find the value of $\boldsymbol{x}$ and $\mathbf{m} \angle \mathbf{R X S}$.

$x=$ $\qquad$ $\mathrm{m} \angle \mathrm{RXS}=$ $\qquad$
13. If $\mathbf{m} \angle \mathbf{P X Q}=(6 x-2)^{\circ}$ and $\mathbf{m} \angle \mathbf{P X S}=(7 x+6)^{\circ}$, find the value of $\mathbf{x}$ and $\mathbf{m} \angle \mathbf{Q X S}$.

$\qquad$
$=$
$\mathrm{m} \angle \mathrm{QXS}=$ $\qquad$


Given that $\overrightarrow{\boldsymbol{B E}}$ bisects $\angle \mathbf{A B D}$ below, find each of the following.
14. If $\mathbf{m} \angle A B D=(22 n-11)^{\circ}$ and $m \angle A B E=(12 n-8)^{\circ}$, find the value of $n$ and $m \angle E B D$.
$\mathrm{n}=$ $\qquad$
$\mathrm{m} \angle \mathrm{EBD}=$ $\qquad$


