$\qquad$
$\qquad$ Date $\qquad$
Finding Missing Angles \#1
Without using a protractor, find the exact measures of the indicated angles in the diagrams below.
1.

2.

3.

$\mathrm{a}=$
$\mathrm{b}=$ $\qquad$ $\mathrm{a}=$ $\qquad$
$\mathrm{a}=$ $\qquad$
b $=$ $\qquad$
c $=$ $\qquad$

$$
\mathrm{d}=
$$

4. 


5.

6.

$\mathrm{a}=$ $\qquad$ $\mathrm{a}=$ $\qquad$
$\mathrm{a}=$ $\qquad$
b $=$ $\qquad$ b $=$ $\qquad$ $\mathrm{b}=$ $\qquad$
c = $\qquad$ c $=$ $\qquad$ $\mathrm{c}=$
$\mathrm{d}=$ $\qquad$ d = $\qquad$
$\mathrm{e}=$ $\qquad$
e = $\qquad$

10.

$\mathrm{a}=$ $\qquad$
b $=$ $\qquad$
c $=$ $\qquad$
d = $\qquad$
$\mathrm{a}=$
b $=$
$\qquad$
c = $\qquad$
$\mathrm{d}=$ $\qquad$
e = $\qquad$
$\mathrm{f}=$ $\qquad$

Find the measures of x and y in each problem. Make sure to show your work.
11.

12.


## Fill in each blank with a true statement.

13. If $\angle A \cong \angle B$ and the supplement of $\angle B$ has measure $22^{\circ}$, then $m \angle A=$ $\qquad$ .
14. If $\angle P$ is a right angle and $\angle P$ and $\angle Q$ form a linear pair, then $m \angle Q$ is $\qquad$ .
15. If $\angle S$ and $\angle T$ are complementary and $\angle T$ and $\angle U$ are supplementary, then $\angle U$ is a(n) $\qquad$ angle.
16. If one angle of a linear pair is obtuse, then the other is $\qquad$ .
