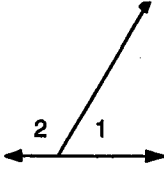
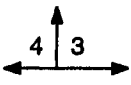



## 1-12 Finding Missing Angles

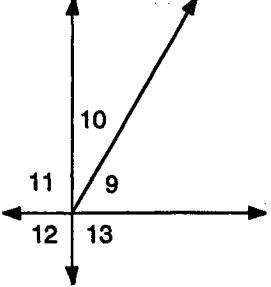
Study the diagrams and the information, then find the measure of each missing angle. A good strategy is to label each diagram with the information you are given. This will help you to "see" possible clues that will help you to find the missing measures. Be careful. In some cases, not enough information is given to find the missing measures. For those problems, write NEI for "not enough information."

1.   $m\angle 1 = 60$   
 $m\angle 2 = \underline{\hspace{2cm}}$

2.   $\angle 3 \cong \angle 4$   
 $m\angle 3 = \underline{\hspace{2cm}}$   
 $m\angle 4 = \underline{\hspace{2cm}}$

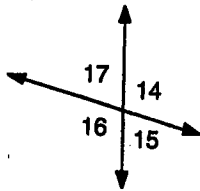
3.   $\angle ABC$  is a right angle  
 $m\angle 5 = \underline{\hspace{2cm}}$   
 $m\angle 6 = \underline{\hspace{2cm}}$

4.   $\angle DEF$  is a right angle  
 $\angle 7 \cong \angle 8$   
 $m\angle 7 = \underline{\hspace{2cm}}$   
 $m\angle 8 = \underline{\hspace{2cm}}$

5.   $m\angle 10 = 50$   
 $m\angle 9 = \underline{\hspace{2cm}}$   
 $m\angle 11 = \underline{\hspace{2cm}}$   
 $m\angle 12 = \underline{\hspace{2cm}}$   
 $m\angle 13 = \underline{\hspace{2cm}}$

**1-12 (Cont'd)**

6.



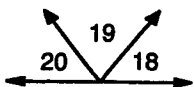
$$m\angle 14 = 110$$

$$m\angle 15 = \underline{\hspace{2cm}}$$

$$m\angle 16 = \underline{\hspace{2cm}}$$

$$m\angle 17 = \underline{\hspace{2cm}}$$

7.



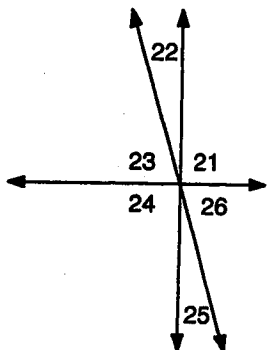
$$m\angle 18 = m\angle 19 = m\angle 20$$

$$m\angle 18 = \underline{\hspace{2cm}}$$

$$m\angle 19 = \underline{\hspace{2cm}}$$

$$m\angle 20 = \underline{\hspace{2cm}}$$

8.



$$m\angle 22 = 15$$

$$m\angle 21 = \underline{\hspace{2cm}}$$

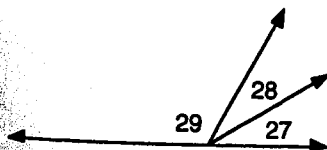
$$m\angle 23 = \underline{\hspace{2cm}}$$

$$m\angle 24 = \underline{\hspace{2cm}}$$

$$m\angle 25 = \underline{\hspace{2cm}}$$

$$m\angle 26 = \underline{\hspace{2cm}}$$

9.



$$m\angle 28 = 2m\angle 27$$

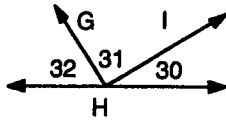
$$m\angle 29 = 3m\angle 28$$

$$m\angle 27 = \underline{\hspace{2cm}}$$

$$m\angle 28 = \underline{\hspace{2cm}}$$

$$m\angle 29 = \underline{\hspace{2cm}}$$

10.

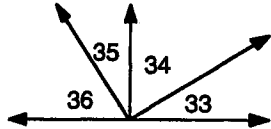


$\angle GHI$  is a right angle

$m\angle 31 = \underline{\hspace{2cm}}$

$m\angle 32 + m\angle 30 = \underline{\hspace{2cm}}$

11.



$m\angle 34 = 62$

$\angle 34$  and  $\angle 35$  are complementary

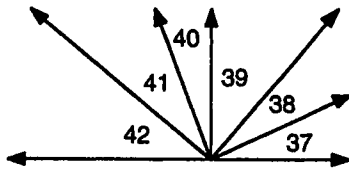
$\angle 33$  and  $\angle 34$  are complementary

$m\angle 33 = \underline{\hspace{2cm}}$

$m\angle 35 = \underline{\hspace{2cm}}$

$m\angle 36 = \underline{\hspace{2cm}}$

12.



$m\angle 39 = 40$

$m\angle 37 + m\angle 38 + m\angle 39 = 90$

$m\angle 37 + m\angle 38 + m\angle 39 + m\angle 40 = 110$

$m\angle 40 + m\angle 41 + m\angle 39 = 90$

$m\angle 37 = \underline{\hspace{2cm}}$

$m\angle 38 = \underline{\hspace{2cm}}$

$m\angle 40 = \underline{\hspace{2cm}}$

$m\angle 41 = \underline{\hspace{2cm}}$

$m\angle 42 = \underline{\hspace{2cm}}$