

HW #1 Practice
For use after Lesson 7.1

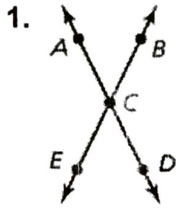
The Meaning of a Word ● Adjacent

When two states are adjacent,

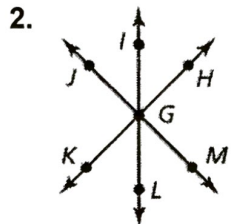
they are next to each other and the share a common border.



Name two pairs of adjacent angles and two pairs of vertical angles in the figure.



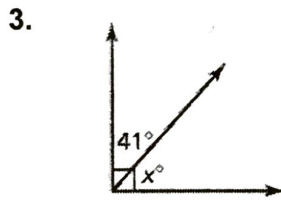
- $\angle ACB + \angle BCD$
- $\angle BCD + \angle DCE$
- $\angle ACE + \angle BCD$
- $\angle ECD + \angle ACB$



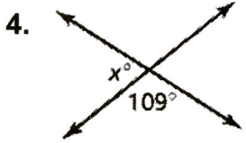
- $\angle JGI + \angle IGH$
- $\angle HGM + \angle MGL$
- $\angle IGH + \angle KGL$
- $\angle MGL + \angle IGJ$

Tell whether the angles are *adjacent* or *vertical*. Then find the value of x .

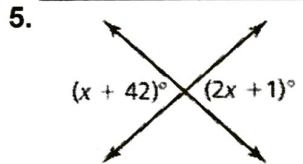
hint: set the two angles equal to each other and solve



Adjacent
 $90 - 41 = 49^\circ$



Adjacent
 $180 - 109 = 71^\circ$



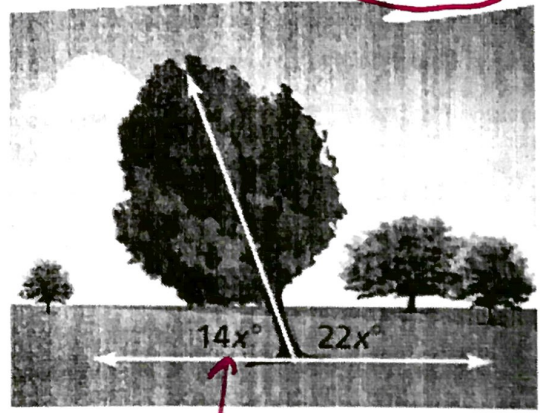
vertical
 $x + 42 = 2x + 1$
 $-x \quad -x$
 $42 = x + 1$
 $-1 \quad -1$
 $41 = x$

6. A tree is leaning toward the ground. How many degrees does the tree have to fall before hitting the ground?

$14x + 22x = 180$

$\frac{36x}{36} = \frac{180}{36}$

$x = 5$



$14(5) = 70$

The tree has 70° before it hits the ground