Key

SECTION 1.4 DAY 1:

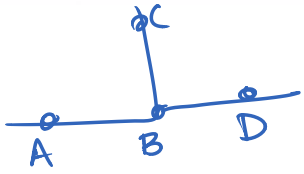
Page 31-33

#1, 2, 7-11, 23, 24, 26, 29, 39, 42

Vocabulary Apply the vocabulary from this lesson to answer each question.

1. An angle measures $x°$. What is the measure of its *complement*? What is the measure of its *supplement*? $90-x$ $180-x$

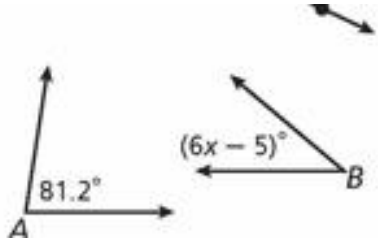
2. $\angle ABC$ and $\angle CBD$ are *adjacent angles*. Which side do the angles have in common?



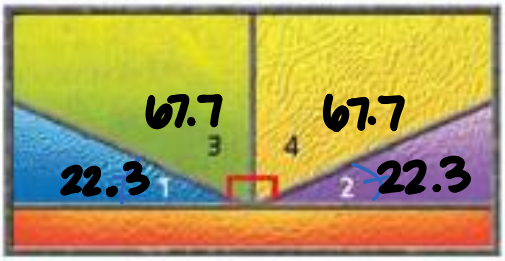
Ray $\overrightarrow{BC}$

Find the measure of each of the following.

7. supplement of $\angle A$ 98.8
8. complement of $\angle A$ 8.8
9. supplement of $\angle B$ $185-6x$
10. complement of $\angle B$ $95-6x$



23. **Art** In the stained glass pattern, $\angle 1 \cong \angle 2$. $\angle 1$ and $\angle 3$ are complementary, and $\angle 2$ and $\angle 4$ are complementary. If $m\angle 1 = 22.3°$, find $m\angle 2$, $m\angle 3$, and $m\angle 4$.



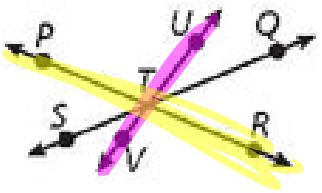
$\angle 1 = 22.3$

$\angle 3 = 67.7$

$\angle 4 = 67.7$

$\angle 2 = 22.3$

24. Name the pairs of vertical angles.



∠PTS and ∠QTR
∠PTQ and ∠STR
∠STV and ∠UTQ
∠STU and ∠VTR
∠PTU and ∠VTR
∠PTV and ∠UTR

Multi-Step $\angle ABD$ and $\angle BDE$ are supplementary. Find the measures of both angles.

26. $m\angle ABD = 5x°$, $m\angle BDE = (17x - 18)°$

$m\angle ABD =$ 45°

$m\angle BDE =$ 135°

$x = 9$

Multi-Step $\angle ABD$ and $\angle BDC$ are complementary. Find the measures of both angles.

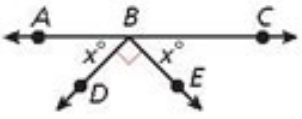
29. $m\angle ABD = (5y + 1)°$, $m\angle BDC = (3y - 7)°$

$m\angle ABD = 61°$

$m\angle BDC = 29°$

$y = 12$

39. What is the value of x in the diagram?



(A) 15
(B) 30
(C) 45
(D) 90