

Name _____

Date _____

LESSON 1.5

Practice C

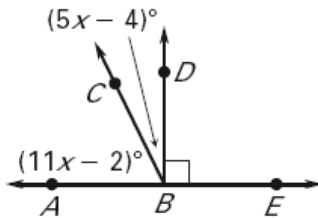
For use with pages 35–41

$\angle 1$ and $\angle 2$ are complementary angles and $\angle 2$ and $\angle 3$ are supplementary angles. Given the measure of $\angle 1$, find $m\angle 2$ and $m\angle 3$.

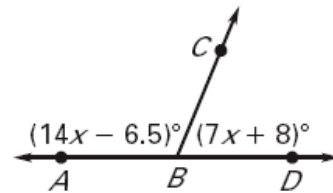
1. $m\angle 1 = 43^\circ$
2. $m\angle 1 = 28^\circ$
3. $m\angle 1 = 69.5^\circ$
4. $m\angle 1 = 17.5^\circ$

Find $m\angle ABC$ and $m\angle CBD$.

5.

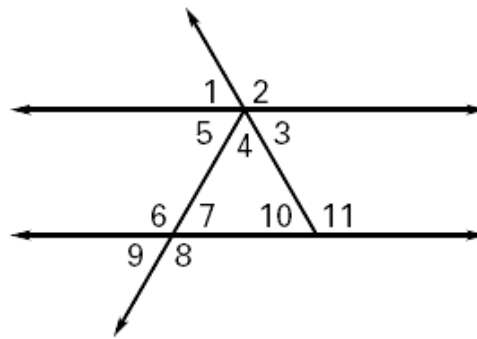


6.



In Exercises 8–15, use the diagram. Tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.

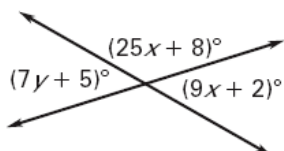
7. $\angle 1$ and $\angle 2$
8. $\angle 1$ and $\angle 3$
9. $\angle 2$ and $\angle 4$
10. $\angle 4$ and $\angle 5$
11. $\angle 6$ and $\angle 8$
12. $\angle 8$ and $\angle 9$
13. $\angle 7$ and $\angle 10$
14. $\angle 10$ and $\angle 11$



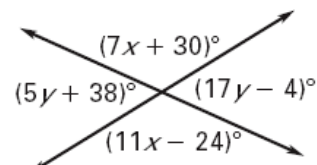
15. The measure of one angle is 7 times the measure of its complement. Find the measure of each angle.
16. Two angles form a linear pair. The measure of one angle is 15 times the measure of the other angle. Find the measure of each angle.
17. The measure of one angle is 47° less than the measure of its supplement. Find the measure of each angle.

Find the values of x and y .

18.



19.



Tell whether the statement is *always*, *sometimes*, or *never* true. Explain your reasoning.

20. Two vertical angles are adjacent.
21. Two supplementary angles consist of one acute angle and one obtuse angle.
22. An angle that has a complement also has a supplement.

$\angle A$ and $\angle B$ are complementary angles. Find $m\angle A$ and $m\angle B$.

23. $m\angle A = 5x^\circ$
 $m\angle B = (17x + 2)^\circ$
24. $m\angle A = (21x + 12)^\circ$
 $m\angle B = (35x - 6)^\circ$

$\angle A$ and $\angle B$ are supplementary angles. Find $m\angle A$ and $m\angle B$.

25. $m\angle A = (x + 11)^\circ$
 $m\angle B = (x - 15)^\circ$
26. $m\angle A = (9x + 28.5)^\circ$
 $m\angle B = (-5x + 101.5)^\circ$

In Exercises 27-30, use the star at the right and the angles identified to name two pairs of the indicated type of angle pair.

27. Supplementary angles
28. Vertical angles
29. Linear pair
30. Adjacent angles

