Name _____ **Date** _____

LESSON 1.5

Practice B

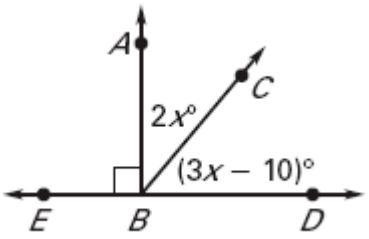
For use before Lesson 35–41

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

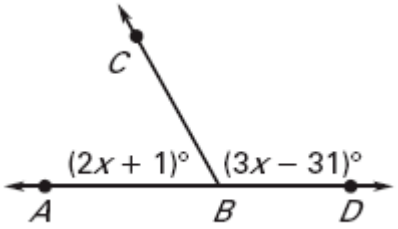
1. $m\angle 1 = 80°$
2. $m\angle 1 = 33°$
3. $m\angle 1 = 72°$
4. $m\angle 1 = 7°$

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

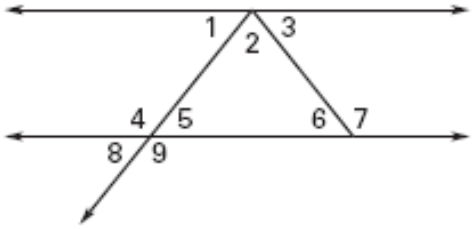
5.



6.



In Exercises 8–12, use the diagram. Tell whether the angles are *vertical angles*, a *linear pair*, or *neither*

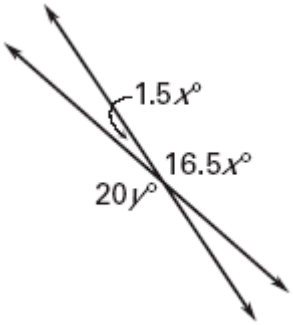


7. ∠1 and ∠3
8. ∠2 and ∠3
9. ∠4 and ∠5
10. ∠5 and ∠8
11. ∠4 and ∠9

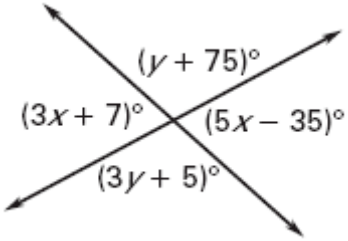
12. The measure of one angle is three times the measure of its complement. Find the measure of each angle.
13. Two angles form a linear pair. The measure of one angle is 8 times the measure of the other angle. Find the measure of each angle.
14. The measure of one angle is 38° less than the measure of its supplement. Find the measure of each angle.

Find the values of *x* and *y*.

15.



16.



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

17. $m\angle A = x°$
$m\angle B = (2x - 75)°$

18. $m\angle A = (2x + 10)°$
$m\angle B = (-x + 55)°$

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

19. $m\angle A = (x + 50)°$
$m\angle B = (x + 100)°$

20. $m\angle A = (-4x + 40)°$
$m\angle B = (x + 50)°$

Roof trusses can have several different layouts. The diagram below shows one type of roof truss made out of beams of wood. Use the diagram to identify two different examples of the indicated type of angle pair. In the diagram, $\angle HBC$ and $\angle BCE$ are right angles.

21. Supplementary angles

22. Complementary angles

23. Vertical angles

24. Linear pair angles

25. Adjacent angles