24. Name two pairs of angles that form a linear pair in the diagram at the right.
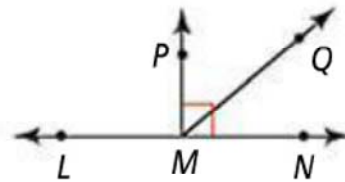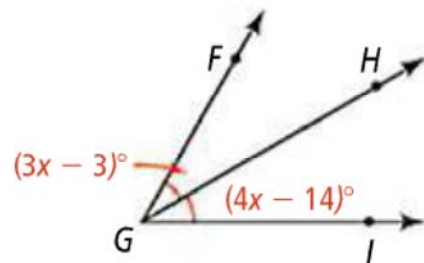
25. $\angle EFG$ and $\angle GFH$ are a linear pair, $m\angle EFG = 2n + 21$, and $m\angle GFH = 4n + 15$. What are $m\angle EFG$ and $m\angle GFH$?

26. Algebra In the diagram, $\overrightarrow{GH}$ bisects $\angle FGI$.
   a. Solve for x and find $m\angle FGH$.
   b. Find $m\angle HGI$.
   c. Find $m\angle FGI$.

$(3x - 3)°$

$(4x - 14)°$

Algebra $\overrightarrow{BD}$ bisects $\angle ABC$. Solve for x and find $m\angle ABC$.

27. $m\angle ABD = 5x$, $m\angle DBC = 3x + 10$

28. $m\angle ABC = 4x - 12$, $m\angle ABD = 24$

29. $m\angle ABD = 4x - 16$, $m\angle CBD = 2x + 6$

30. $m\angle ABD = 3x + 20$, $m\angle CBD = 6x - 16$

Algebra Find the measure of each angle in the angle pair described.

31. Think About a Plan The measure of one angle is twice the measure of its supplement.
   • How many angles are there? What is their relationship?
   • How can you use algebra, such as using the variable x, to help you?

32. The measure of one angle is 20 less than the measure of its complement.

In the diagram at the right, $m\angle ACB = 65$. Find each of the following.

33. $m\angle ACD$ **34.** $m\angle BCD$

35. $m\angle ECD$ **36.** $m\angle ACE$
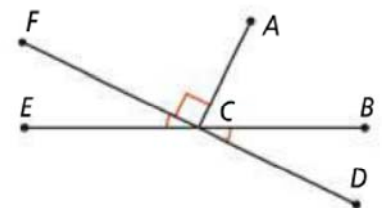
37. Algebra $\angle RQS$ and $\angle TQS$ are a linear pair where $m\angle RQS = 2x + 4$ and $m\angle TQS = 6x + 20$.
   a. Solve for x.
   b. Find $m\angle RQS$ and $m\angle TQS$.
   c. Show how you can check your answer.