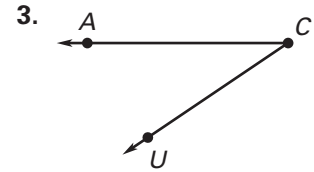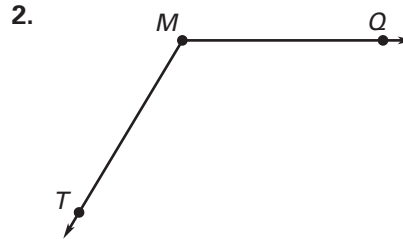## Practice C
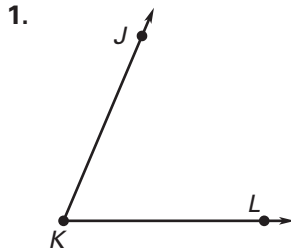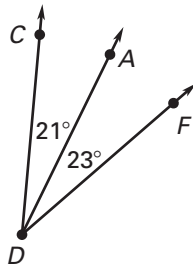
For use with pages 26–32

Use a protractor to measure each angle to the nearest degree. Write two names for each angle.
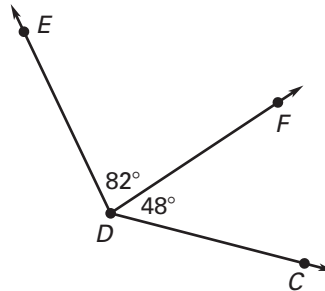
1.

2.

3.

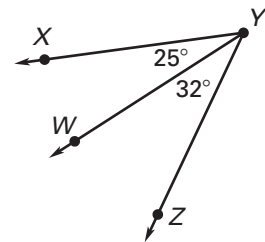**Use the Angle Addition Postulate to find the measure of the unknown angle.**

4. $m\angle FDC = \underline{\quad?\quad}$

5. $m\angle CDE = \underline{\quad?\quad}$

6. $m\angle XYZ = \underline{\quad?\quad}$

In a coordinate plane, plot the points and sketch $\angle ABC$. Classify the angle. Write the coordinates of a point that lies in the interior of the angle and the coordinates of a point that lies in the exterior of the angle.

7. $A(-5, -4)$
   $B(-3, 0)$
   $C(1, -4)$

8. $A(-5, 0)$
   $B(-1, -4)$
   $C(4, 2)$

9. $A(0, 1)$
   $B(-2, -4)$
   $C(-7, -2)$

In Exercises 10–13, use the following information.

Q is in the interior of $\angle ROS$. S is in the interior of $\angle QOP$. P is in the interior of $\angle SOT$. $m\angle ROT = 127°$, $m\angle SOT = 71°$, and $m\angle ROQ = m\angle QOS = m\angle POT$. Make a sketch and answer the following.

10. Find $m\angle QOP$

11. Find $m\angle QOT$

12. Find $m\angle ROQ$

13. Find $m\angle SOP$

Let Q be in the interior of $\angle POR$. Use the Angle Addition Postulate to solve for x. Find the measure of each angle.

14. $m\angle POQ = (x + 4)°$
    $m\angle QOR = (2x - 2)°$
    $m\angle POR = 26°$

15. $m\angle POQ = (3x + 7)°$
    $m\angle QOR = (5x - 2)°$
    $m\angle POR = 61°$

16. $m\angle POQ = \left(\frac{1}{3}x + \frac{1}{3}\right)°$
    $m\angle QOR = \left(2x + \frac{4}{3}\right)°$
    $m\angle POR = (5x - 1)°$