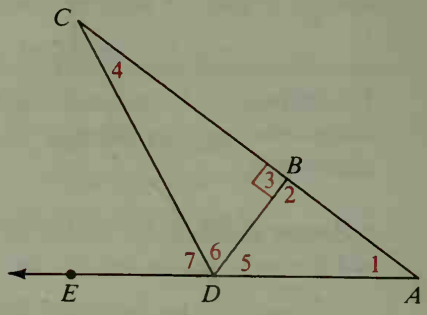
Classroom Exercises

Name the vertex and the sides of the given angle.

1. $\angle 4$ 2. $\angle 1$ 3. $\angle 6$

4. Name all angles adjacent to $\angle 6$.
5. Name three angles that have B as the vertex.
6. How many angles have D as the vertex?



Exs. 1-16

State whether the angle appears to be acute, right, obtuse, or straight. Then estimate its measure.

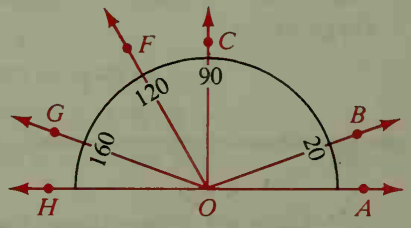
7. $\angle 1$ 8. $\angle 2$ 9. $\angle EDB$
10. $\angle CDB$ 11. $\angle ADC$ 12. $\angle ADE$

Complete.

13. $m\angle 7 + m\angle 6 = m\angle$ ____ 14. $m\angle 6 + m\angle 5 = m\angle$ ____
15. $m\angle 2 + m\angle 3 =$ ____ 16. If $\overrightarrow{DB}$ bisects $\angle CDA$, then $\angle$ ____ $\cong \angle$ ____.

State the measure of each angle.

17. $\angle BOC$ 18. $\angle GOH$
19. $\angle FOG$ 20. $\angle COF$
21. $\angle GOB$ 22. $\angle HOA$

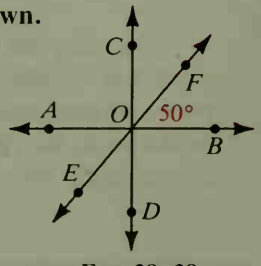


Exs. 17-25

23. Name four angles that are adjacent to $\angle FOG$.
24. What ray bisects which two angles?
25. Name a pair of congruent:
    a. acute angles **b.** right angles **c.** obtuse angles
26. Study a corner of your classroom where two walls and the ceiling meet. How many right angles can you see at the corner?
27. Draw an angle, $\angle AOB$, on a sheet of paper. Fold the paper so that $\overrightarrow{OA}$ falls on $\overrightarrow{OB}$. Lay the paper flat and call the fold line $\overleftrightarrow{OK}$. How is $\overrightarrow{OK}$ related to $\angle AOB$? Explain.

Given the diagram, state whether you can reach the conclusion shown.

28. $m\angle FOB = 50$ 29. $m\angle AOC = 90$
30. $m\angle DOC = 180$ 31. $AO = OB$
32. $\angle AOC \cong \angle BOC$ 33. $m\angle AOF = 130$



Exs. 28-38

34. Points E, O, and F are collinear.
35. Point C is in the interior of $\angle AOF$.
36. $\angle AOE$ and $\angle AOD$ are adjacent angles.
37. $\angle AOB$ is a straight angle. 38. $\overrightarrow{OA}$ and $\overrightarrow{OB}$ are opposite rays.