

Classroom Exercises

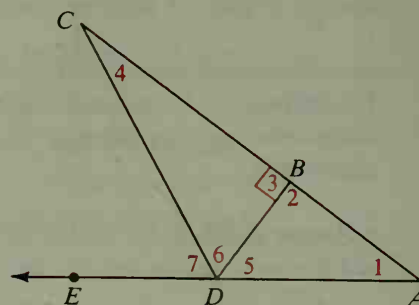
Name the vertex and the sides of the given angle.

1. $\angle 4$ \overrightarrow{CD} \overrightarrow{CB} 2. $\angle 1$ 3. $\angle 6$

4. Name all angles adjacent to $\angle 6$. $\angle 5$ $\angle 7$

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.

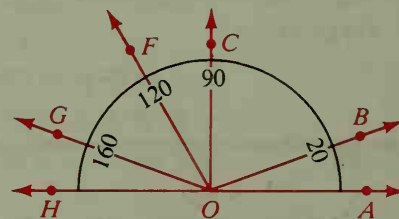
7. $\angle 1$ 8. $\angle 2$ 9. $\angle EDB$
10. $\angle CDB$ 11. $\angle ADC$ 12. $\angle ADE$

Complete.

13. $m\angle 7 + m\angle 6 = m\angle \text{? } EDB$ 14. $m\angle 6 + m\angle 5 = m\angle \text{? } CDA$
15. $m\angle 2 + m\angle 3 = \text{? } 180^\circ$ 16. If \overrightarrow{DB} bisects $\angle CDA$, then $\angle \text{?} \cong \angle \text{?}$.

State the measure of each angle.

17. $\angle BOC$ 70° 18. $\angle GOH$ 160°
19. $\angle FOG$ 40° 20. $\angle COF$ 30°
21. $\angle GOB$ 140° 22. $\angle HOA$ 180°



Exs. 17-25

23. Name four angles that are adjacent to $\angle FOG$.

24. What ray bisects which two angles? $\angle COA$, $\angle COH$

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 \overrightarrow{OK} . How is \overrightarrow{OK} related to $\angle AOB$? Explain.

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

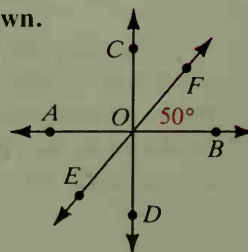
28. $m\angle FOB = 50$ 29. $m\angle AOC = 90$
30. $m\angle DOC = 180$ 31. $AO = OB$
32. $\angle AOC \cong \angle BOC$ 33. $m\angle AOF = 130$

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.



Exs. 28-38