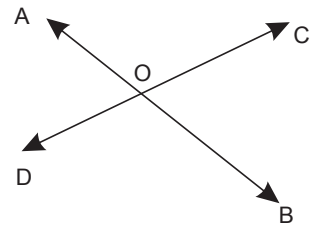


## Worksheet

- Choose the correct answer.
  - Two angles are supplementary to each other. If one of them measures  $70^\circ$ , then the measure of other angle is
    - $20^\circ$
    - $80^\circ$
    - $110^\circ$
    - $50^\circ$
  - A bicycle wheel has 36 spokes. Find the angle between the adjacent spokes.
    - $10^\circ$
    - $15^\circ$
    - $12^\circ$
    - $18^\circ$
  - $\angle P$  and  $\angle Q$  form a linear pair. If one is reduced by  $15^\circ$ , then the other should be
    - increased by  $15^\circ$
    - increased by  $30^\circ$
    - decreased by  $15^\circ$
    - decreased by  $30^\circ$

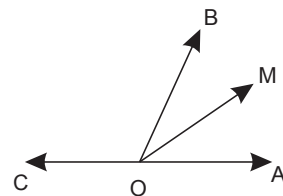
- State whether true or false.

- The measure of reflex angle of  $30^\circ$  is  $230^\circ$ .
- The angle which is one-fifth of its supplement is  $30^\circ$ .
- In the given figure, if measure of  $\angle BOC$  is  $55^\circ$ , then the measure of  $\angle AOC$  is also  $55^\circ$ .
- If two angles are supplementary, they must always be in a linear pair.
- If the measure of an angle is  $89.98^\circ$ , it is an acute angle.

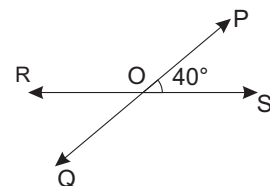


- Two angles are in the ratio 2 : 3. If they form a linear pair, find their measures.
- If an angle is twice its supplement angle, then what are their measures?

- In the given figure, the measure of  $\angle AOB$  is equal to one-third of the straight angle  $\angle AOC$ . If OM is the bisector of  $\angle AOB$ , what are the measures of the angles  $\angle AOM$  and  $\angle BOM$ ?



- In the given figure, find the measures of  $\angle POR$ ,  $\angle ROQ$  and  $\angle QOS$ .



- At 4 o'clock, the arms of a clock make an obtuse angle and a reflex angle. Find the measure of each of these angles.
- What is the complement of  $86^\circ$ ?

9. For what value of  $x$  is the sum of  $(2x + 3)^\circ$  and  $(7x + 6)^\circ$  a complementary angle? Also, find the angles.
10. Draw an angle measuring  $44^\circ$  using protractor. What type of angle is that?
11. If  $\angle A = 25^\circ$  and  $\angle B = 32^\circ$ , find  $\angle A + \angle B$ .

## Answers to Worksheet

1. a. iii                      b. i                      c. i
2. a. False                    b. True                    c. False                    d. False                    e. True
3.  $72^\circ, 108^\circ$               4.  $60^\circ, 120^\circ$
5.  $30^\circ, 30^\circ$               6.  $140^\circ, 40^\circ, 140^\circ$                       7.  $120^\circ, 240^\circ$
8.  $4^\circ$                       9.  $x = 9, 21^\circ, 69^\circ$
10. acute angle              11.  $57^\circ$