

## MATHS

### BOOKS - RS AGGARWAL MATHS (HINGLISH)

#### LINES AND ANGLES

#### Examples

1. Find the complement of each of the following angles:

$60^\circ$

$25^\circ$

$72^\circ$



Watch Video Solution

2. Find the angle which is its own component.



[Watch Video Solution](#)

3. Find the supplement of each of the following angles:

$125^\circ$

$64^\circ$

$38^\circ$



[Watch Video Solution](#)

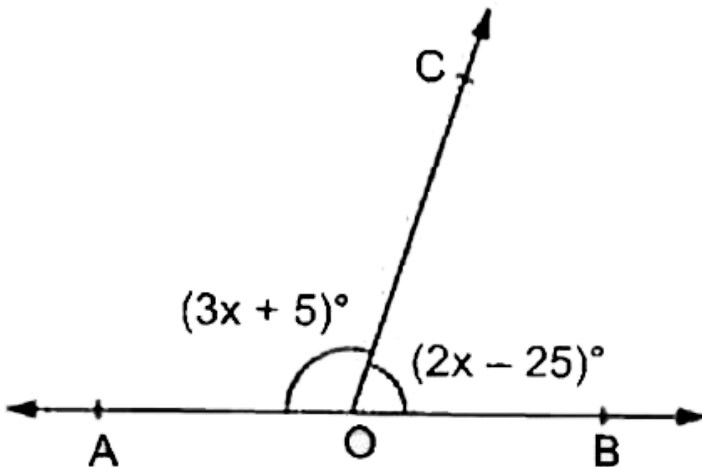
4. Find the angle which is double of its supplement.

 Watch Video Solution

5. In the given,  $AB$  a straight line and  $\angle BOC = 65^\circ$

 Watch Video Solution

6. In the adjoining figure, What value of  $x$  will make  $AOB$  a straight-line?



A.  $x = 32^\circ$

B.  $x = 45^\circ$

C.  $x = 36^\circ$

D.  $x = 40^\circ$

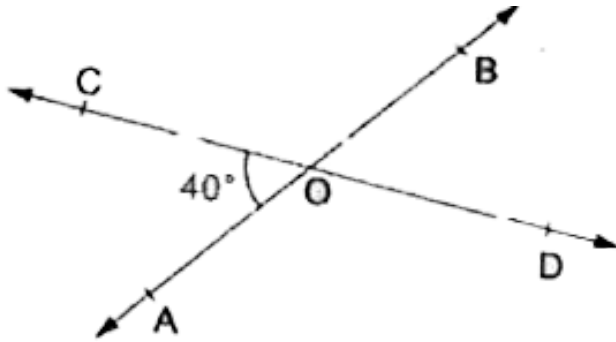
**Answer: D**



**Watch Video Solution**

7. Two lines  $AB$  and  $CD$  intersect at a point  $O$ .  
 $\angle AOC = 40^\circ$ , find the measure of each of the angles

$\angle AOD$ ,  $\angle BOD$  and  $\angle BOC$ .



A.

$$\angle AOD = 160^\circ, \angle BOD = 40^\circ \text{ and } \angle BOC = 160^\circ$$

B.

$$\angle AOD = 110^\circ, \angle BOD = 40^\circ \text{ and } \angle BOC = 110^\circ$$

C.

$$\angle AOD = 140^\circ, \angle BOD = 40^\circ \text{ and } \angle BOC = 140^\circ$$

D.

$$\angle AOD = 150^\circ, \angle BOD = 50^\circ \text{ and } \angle BOC = 140^\circ$$

**Answer: C**



**Watch Video Solution**

## Exercise 13

1. Find the complement of each of the following angles:

$35^\circ$   $47^\circ$   $60^\circ$   $73^\circ$



**Watch Video Solution**

2. Find the supplement of each of the following angles:

$80^\circ$

$54^\circ$

$105^\circ$

$123^\circ$



Watch Video Solution

3. Among the two supplementary angles, the measure of the larger angles is  $36^\circ$  more than the measure of the smaller. Find the smaller one?

A.  $72^\circ$

B.  $18^\circ$

C.  $48^\circ$

D.  $30^\circ$

**Answer: A**



**Watch Video Solution**

4. Find the angle which is equal to its supplement.

A.  $90^\circ$

B.  $45^\circ$

C.  $60^\circ$

D. None of these

**Answer: A**



**Watch Video Solution**



5. Can two angles be supplementary if both of them are:  
(i) acute? (ii) obtuse? (iii) right?



[Watch Video Solution](#)

6. In the given figure  $\text{AOB}$  is straight a straight line and the ray  $\text{OC}$  stands on it. If  $\angle \text{AOC} = 64^\circ$  and  $\angle \text{BOC} = x^\circ$ , Find the value of  $x$ .

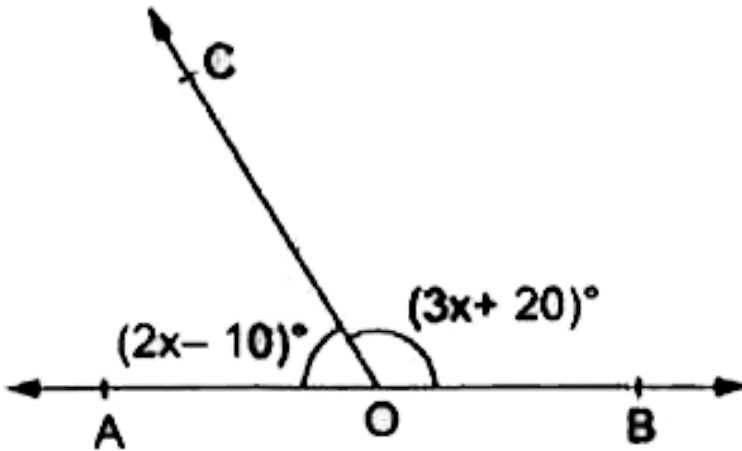


[Watch Video Solution](#)

7. In the given figure  $\text{AOB}$  is a straight line and the ray  $\text{OC}$  stands on it

If  $\angle AOC = (2x - 10)^\circ$  and  $\angle BOC = (3x + 20)^\circ$ .

Find the value of  $x$ . Also, find  $\angle AOC$  and  $\angle BOC$ .



A.  $30^\circ, 58^\circ, 122^\circ$

B.  $34^\circ, 59^\circ, 152^\circ$

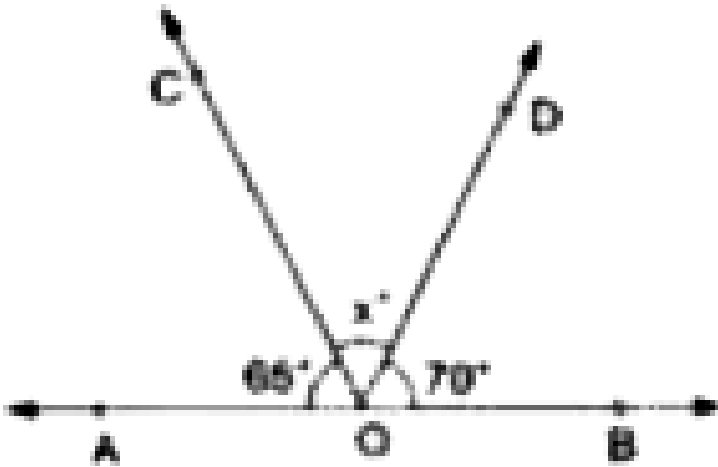
C.  $34^\circ, 58^\circ, 122^\circ$

D.  $94^\circ, 58^\circ, 122^\circ$

**Answer: C**

8. In the figure,  $AOB$  is a straight line and rays  $OC$  and  $OD$  stand on it.

$\angle AOC = 65^\circ$ ,  $\angle BOD = 70^\circ$  and  $\angle COD = x^\circ$ , find the value of  $x$ .



A.  $45^\circ$

B.  $55^\circ$

C.  $40^\circ$

D.  $46^\circ$

**Answer: A**

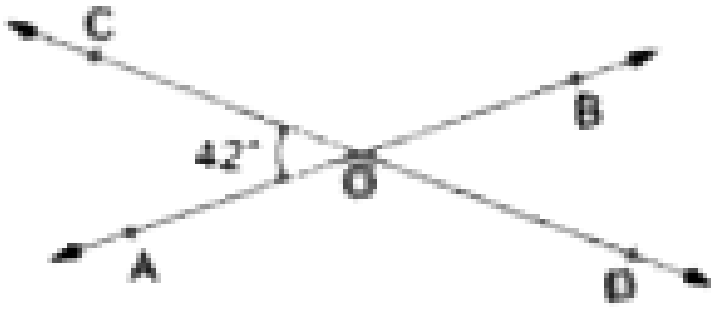


**Watch Video Solution**

9. In the given figure, two straight lines AB and CD intersect at a point O.

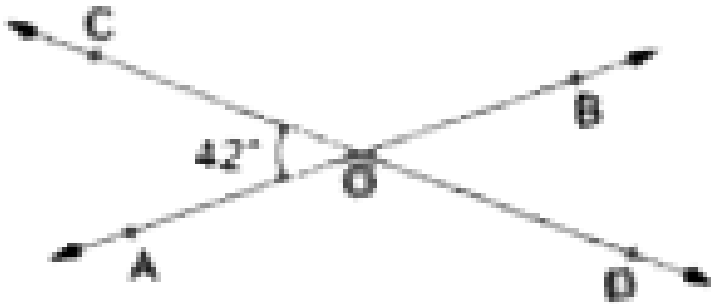
If  $\angle AOC = 42^\circ$ , Find the measure of each of the angles:

$\angle AOD$



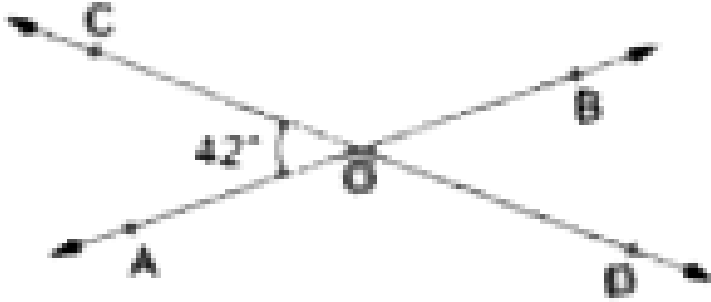
If  $\angle AOC = 42^\circ$ , Find the measure of each of the angles:

$\angle BOD$



If  $\angle AOC = 42^\circ$ , Find the measure of each of the angles:

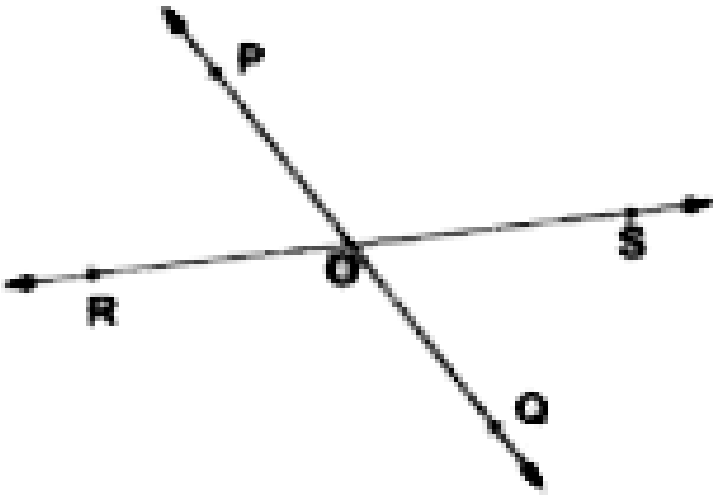
$$an \leq COB$$



Watch Video Solution

10. In the given figure ,two straight line  $PQ$  and  $RS$  intersect at  $O$ .If  $\angle POS = 114^\circ$  ,find the measures of each of the angles :

$\angle POR$



$\angle ROQ$

$\angle QOS$

A.  $\angle ROQ = 114^\circ$

$\angle QOS = 66^\circ$

B.  $\angle ROQ = 116^\circ$

$\angle QOS = 77^\circ$

C.  $\angle ROQ = 117^\circ$

$$\angle QOS = 67^\circ$$

D.  $\angle ROQ = 115^\circ$

$$\angle QOS = 76^\circ$$

**Answer: A**

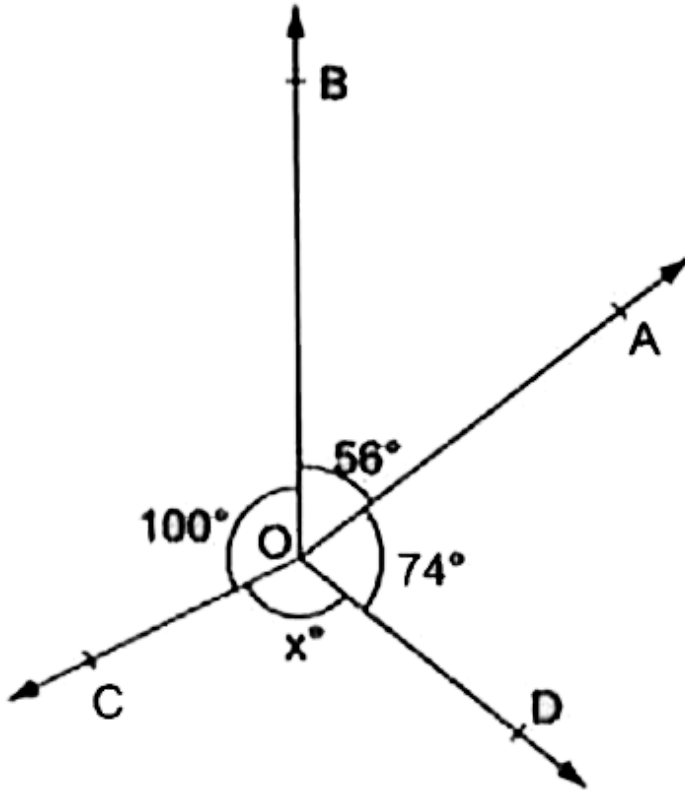


**Watch Video Solution**

**11.** In the given figure, rays  $OA$ ,  $OB$ ,  $OC$  and  $OD$  are such that  $\angle AOB = 56^\circ$ ,  $\angle BOC = 100^\circ$ ,  $\angle COD = x^\circ$



and  $\angle DOA = 74^\circ$ , Find the value of  $x$ .



A.  $x = 90^\circ$

B.  $x = 130^\circ$

C.  $x = 120^\circ$

D.  $x = 110^\circ$

**Answer: B**



**Watch Video Solution**