MATHS

NCERT - NCERT Mathematics(HINGLISH)

LINES AND ANGLES

Exercise 5 2

1. In the given figures below, decide whether l is parallel to m.

2. Find the value of x in each of the following figures if $l \mid \mid m$.

3. In the given figure, the arms of two angles are parallel.If ? , then find(i) angle DGC(ii) angle
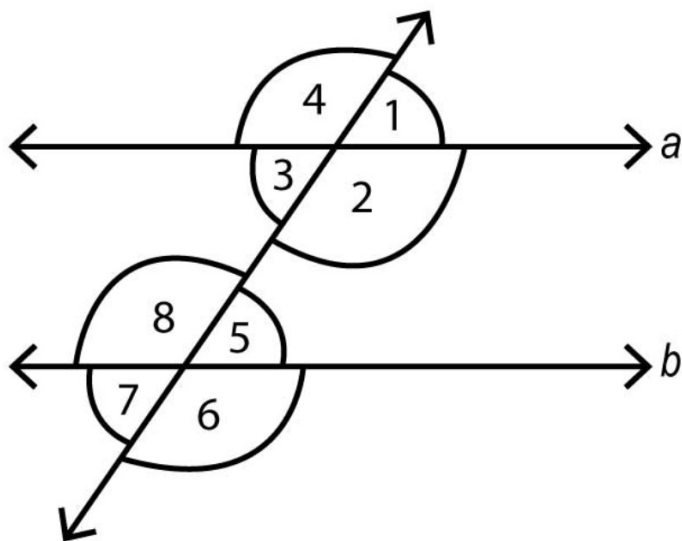
DEF

4. In the adjoining figure, identify(i) the pairs of corresponding angles.(ii) the pairs of alternate interior angles.(iii) the pairs of interior angles on the sameside of the

transversal.(iv) the vertically opposite angles.

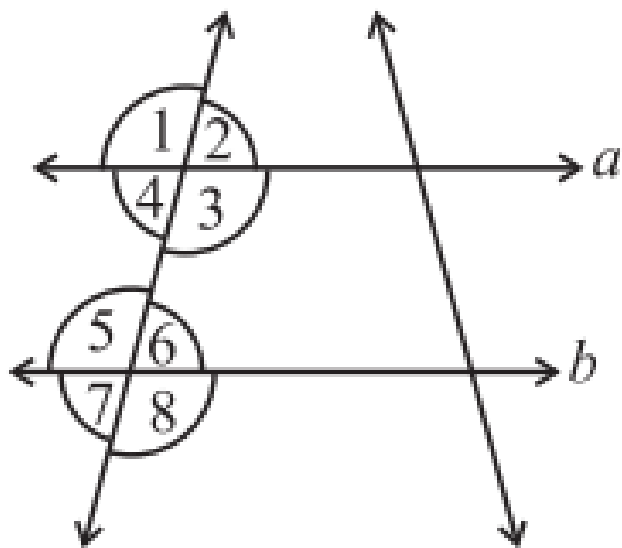**5.** In the adjoining figure, $p \mid \mid q.$ Find the unknown angles.

6. State the property that is used in each of the following statements?

(i) If a || b, then $\angle 1 = \angle 5$.

(ii) If $\angle 4 = \angle 6$, then a || b.

(iii) If $\angle 4 + \angle 5 = 180°$, then a || b

Exercise 5 1

1. Can two angles be supplementary if both of them are:

(i) acute?   (ii) obtuse?   (iii) right?

2. In the given figure, ?1 and ?2 are supplementary angles. If ?1 is decreased, what changes should take place in ?2 so that both the angles still remainsupplementary.

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

    A. $90°$

    B. $135°$

    C. $180°$

    D. $120°$

Answer: A

4. Find the angle which is equal to its complement

5. Identify which of the following pairs of angles are complementary and which are supplementary
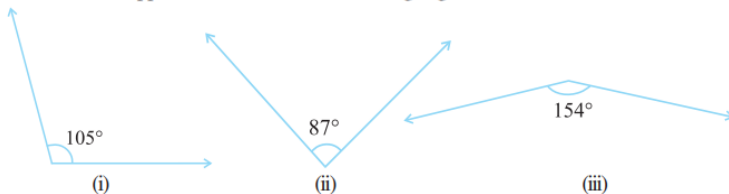
(i) 65 , 115

(ii) 63 , 27

(iii) 112 , 68

(iv) 130 , 50

(v) 45 , 45

(vi) 80 , 10

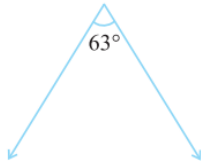**6.** Find the supplement of each of the following angles:
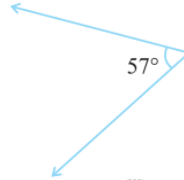

105° (i)   87° (ii)   154° (iii)

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

20° (i)

63° (ii)

57° (iii)

Watch Video Solution

8. In the adjoining figure:
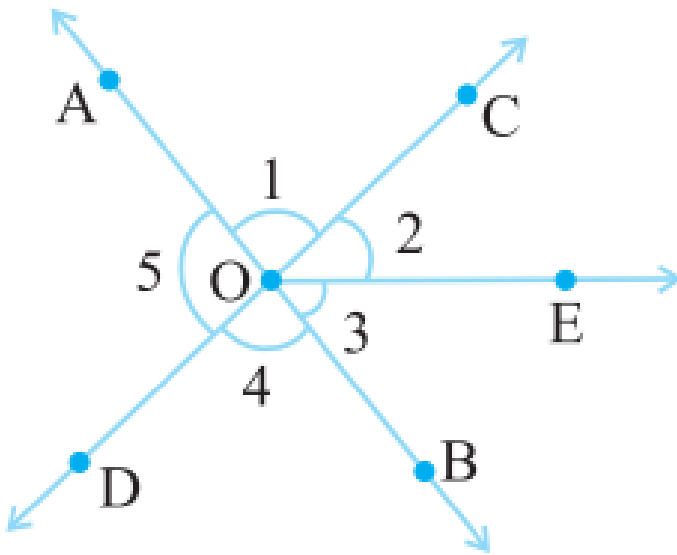
(i) Is ∠1 adjacent to ∠2? (ii) Is ∠AOC adjacent to ∠AOE?

(iii) Do ∠COE and ∠EOD form a linear pair?

(iv) Are ∠BOD and ∠DOA supplementary?

(v) Is ∠1 vertically opposite to ∠4?

(vi) What is the vertically opposite angle of ∠5?

9. An angle is greater than $45°$. Is its complementary angle greater than $45°$ or equal to $45°$ or less than $45°$?

10. Indicate which pairs of angles are:

(i) Vertically opposite angles.

(ii) Linear pairs.
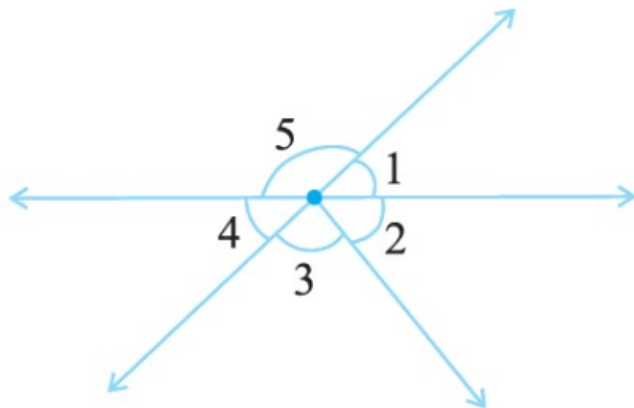
11. In the following figure, is 1 adjacent to 2?

Give reasons

**12.** Find the values of the angles x, y, and z in each of the following:

13. Fill in the blanks:(i) If two angles are complementary, then the sum of their measures is _____.(ii) If two angles are supplementary, then the sum of their

measures is _____.(iii) Two angles forming a linear pair are _____.(iv) If two adjacent angles are supplementary, they form a _____.(v) If two lines intersect at a point, then the vertically opposite angles are always_____.(vi) If two lines intersect at a point, and if one pair of vertically opposite angles areacute angles, then the other pair of vertically opposite angles are _____.

14. In the adjoining figure, name the following pairs of angles.(i) Obtuse vertically opposite angles(ii) Adjacent complementary angles(iii) Equal supplementary angles(iv) Unequal supplementary angles(v) Adjacent angles that do not form a linear pair
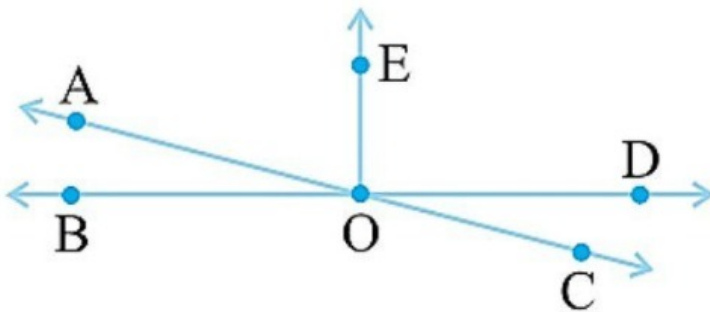
1. In the given figure identify:

(i) Five pairs of adjacent angles.

(ii) Three linear pairs.

(iii) Two pairs of vertically opposite angles

▶ **Watch Video Solution**