Chapter 6

ASSIGNMENT

OBJECTIVE 6.1

1. If two lines intersected by a transversal, then each pair of corresponding angles so formed is "

(A) Equal (B) Complementary (C) Supplementary (D) None of these

2. Two parallel lines have :

(A) a common point (B) two common point

(C) no any common point (D) infinite common points

3. An angle is 14^0 more than its complementary angle then angle is :

(A) 38^0 (B) 52^0 (C) 50^0 (D) none of these

4. The angle between the bisectors of two adjacent supplementary angles is :

(A) acute angle (B) right angle (C) obtuse angle (D) none of these

5. If one angle of triangle is equal to the sum of the other two then triangle is :

(A) acute a triangle (B) obtuse triangle

(C) right triangle (D) none

6. X lines in the interior of $\angle BAC$. If $\angle BAC = 70^0$ and $\angle BAX = 42^0$ then $\angle XAC$ =

(A) 28^0 (B) 29^0 (C) 27^0 (D) 30^0

7. If the supplement of an angle is three times its complement, then angle is :

(A) 40^0 (B) 35^0 (C) 50^0 (D) 45^0

8. Two angles whose measures are a & b are such that $2a - 3b = 60^0$ then $\frac{4a}{5b}$ = ? If they form a linear pair :

(A) 0 (B) $\frac{8}{5}$ (C) $\frac{1}{2}$ (D) $\frac{2}{3}$

9. Which one of the following statements is not false :

(A) if two angles forming a linear pair, then each of these angles is of measure 90^0

(B) angles forming a linear pair can both be acute angles

(C) one of the angles forming a linear pair can be obtuse angle

(D) bisectors of the adjacent angles form a right angle

10. Which one of the following is correct :

(A) If two parallel lines are intersected by a transversal, then alternate angles are equal

(B) If two parallel lines are intersected by a transversal then sum of the interior angles on the same side of transversal is 180^0

(C) If two parallel lines intersected by a transversal then corresponding angles are equal

(D) All of these

SUBEJCTIVE 6.2

1. The supplement of an angle is one third of itself. Determine the angle and its supplement.

2. Two complementary angles are such that two times the measure of one is equal to three times measure of the other. Find the measure of the large angle.

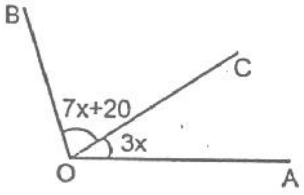
3. Find the complement of each of the following angles.

(A) $36^0 40'$ (B) $42^0 25' 36''$

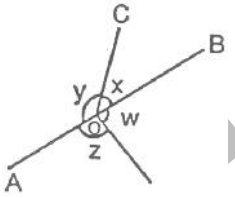
4. Write the supplementary angles of the following anglels .

(A) $54^{0\bullet} 28'$ (B) $98^0\ 35'\ 20''$

5. In figure, if $\angle BOC = 7x + 20^0$ and $\angle COA = 3x$, then find the value of x for which AOB becomes a straight line.

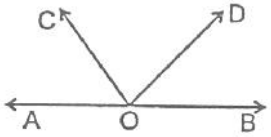


6. In figure, if x + y = w + z then prove that AOB is a straight line.

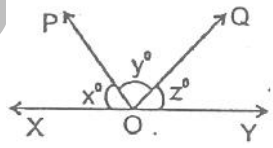


7. If the bisectors of two adjacent angles form a right angle prove that their non common angles are in the same straight line.

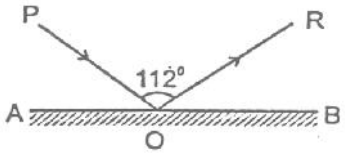
8. In figure, find $\angle COD$ when $\angle AOC + \angle BOD = 100^0$.



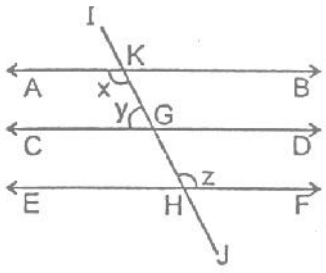
9. In figure x : y : z = 5 : 4 : 6. if XOY is a straight line find the values of x, y and z.



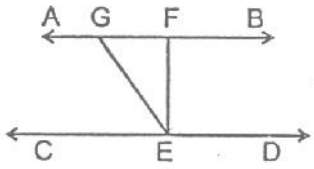
10. In the given figure, AB is a mirror, PO is the incident ray and OR, the reflected ray. If $\angle POR = 112^0$ find $\angle POA$



11. In figure, if AB ‖ CD ‖ EF and y : x = 3 : 7 find x

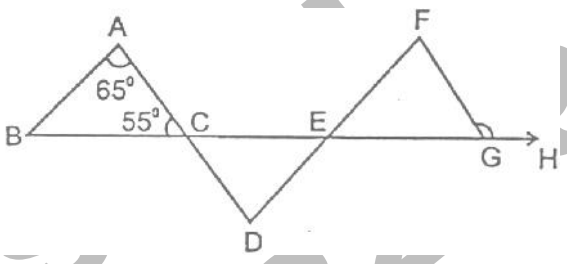


12. In figure if AB ‖ CD, EF $\perp$ CD and $\angle GED = 126^0$, find $\angle AGE$, $\angle GEF$ and $\angle FGE$.



13. Δ ABC is an isosceles triangle in which $\angle B = \angle V$ and L & M are points on AB & AC respectively such that LM ‖ BC. If $\angle A = 50^0$ find $\angle LMC$.

14. In figure if AB ‖ DF, AD ‖ FG, $\angle BAC = 65^0$, $\angle ACB = 55^0$. Find $\angle FGH$



15. In figure, AB ‖ ED and $\angle ABC = 30^0$, $\angle EDC = 70^0$ then find x^0.