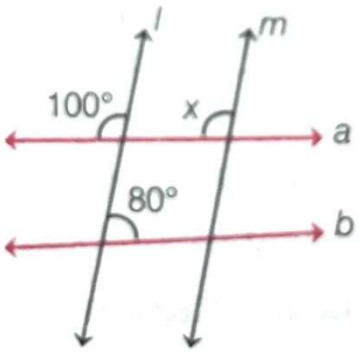
INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

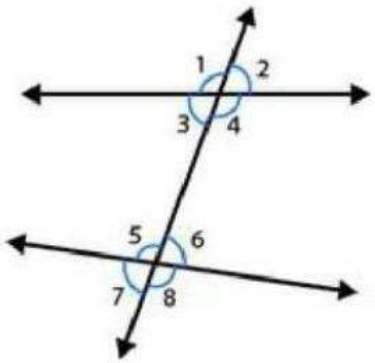
CLASS: VII SUBJECT: MATHEMATICS DATE: 4-12-2025

Lesson 5 : PARALLEL AND INTERSECTING LINES

1. A line that intersects two or more lines at distinct points is called----------
2. Sum of interior angles on the same side of the transversal is--------
3. A pair of adjacent angles whose measures add up to form a straight angle is known as a----------
4. ---------- lines are two lines that intersect at a right angle
5. If a transversal cuts two parallel lines, each pair of corresponding angles are ------- in measure
6. If two lines are intersected by a transversal, then the number of pairs of corresponding angles is----
7. Find the value of x in the following figure if l and m are parallel lines



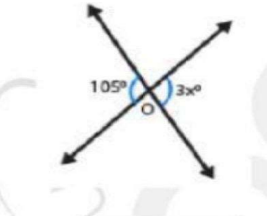
8. From the given figure, write



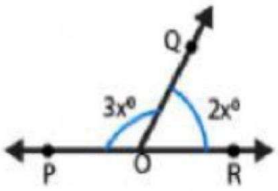
a) Vertically opposite angles
b) Linear pairs

c) Corresponding angles
d) Alternate interior angles
e) Co-interior angles

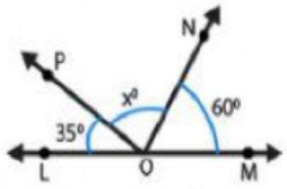
9. In the given figures, find the value of x



X = ☐

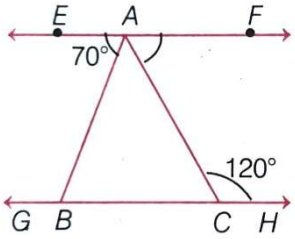


X = ☐

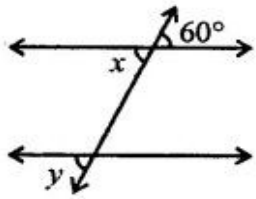


X = ☐

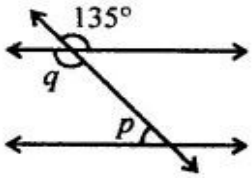
10. In the following figure, EF ‖ GH, ∠EAB = 70° and ∠ACH = 120°. Find ∠CAF and ∠BAC



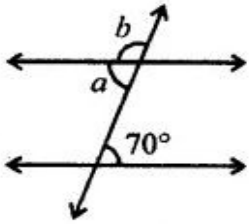
11. In the following figures, find the unknown values when the given two lines are parallel



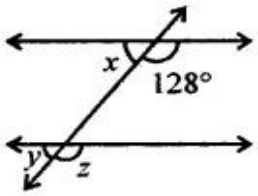
(i)



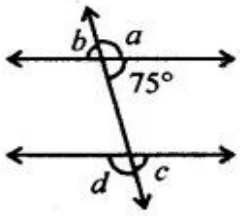
(ii)



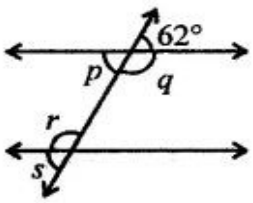
(iii)



(iv)

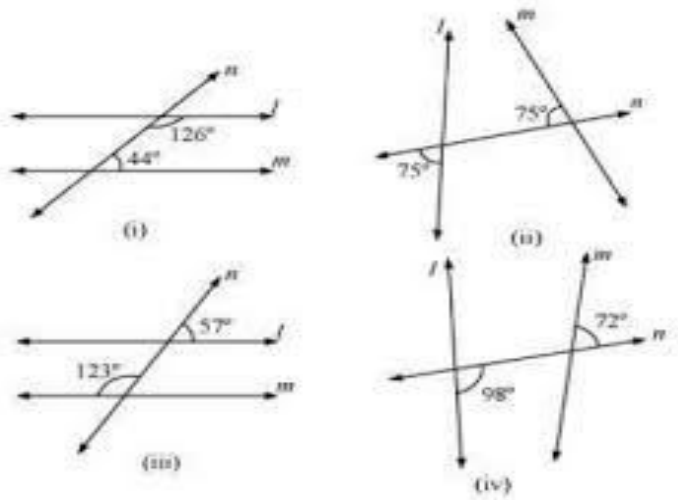


(v)



(vi)

12. In the following figures, check whether the given lines are parallel or not



Answers:

1. Transversal
2. 180°
3. Linear pair
4. Perpendicular
5. Equal
6. 4
7. 100°
8. a) 1&4, 2&3, 5&8, 6&7
   b) 1&2, 2&4, 4&3, 3&1,5&6,6&8, 8&7, 7&5,
   c) 1&5, 2&6, 3&7, 4&8
   d) 3&6, 4&5
   e) 3&5, 4&6
9. a) 35° b) 36° c) 85°
10. ∠CAF = 60°, ∠BAC = 50°
11. i) x = 60°, y = 60°

    ii) q = 135°, p = 45°

    iii) a = 70°, b = 110°

    iv) x = 52°, y = 52°, z = 128°

    v) a = 105°, b = 75°

    vi) p = 62°, q = 118°, r = 118°, s = 62°
12. i) No ii) No iii) Yes iv) No

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