1. If ∠AOC = 70° and ∠BOC = 110°, what is ∠AOB?
   A. 70° B. 110°
   C. 180° D. 90° (C)

Explanation : ∠AOC and ∠BOC form a linear pair, so their sum is ∠AOB = 70° + 110° = 180°.

2. In the figure, ∠POR : ∠ROQ = 3 : 5 and ∠POR + ∠ROQ = 180°. Find ∠ROQ.
   A. 67.5° B. 112.5°
   C. 45° D. 135° (B)

Explanation : Let total = 180°. ∠ROQ = (5/8) × 180 = 112.5°.

3. If one angle of a linear pair is 2x and the other is x + 30, what is the value of x?
   A. 30 B. 40
   C. 50 D. 60 (B)

Explanation : 2x + (x + 30) = 180 ⇒ 3x = 150 ⇒ x = 50.

4. If a transversal cuts two lines such that corresponding angles are equal, what can be concluded?
   A. Lines are perpendicular
   B. Lines are intersecting
   C. Lines are parallel
   D. None (C)

Explanation : If corresponding angles are equal, then the lines are parallel (Converse of Corresponding Angle Axiom).

5. Which angle is formed when hands of a clock show 3 o'clock?
   A. Straight angle B. Acute angle
   C. Right angle D. Reflex angle (C)

Explanation : At 3 o'clock, the angle between hour and minute hands is 90°, a right angle.

6. If ∠AOC and ∠COB are adjacent angles forming a straight line, and ∠AOC = 3x, ∠COB = x, find ∠AOC.
   A. 90° B. 120°
   C. 135° D. 150° (C)

Explanation : 3x + x = 180 ⇒ x = 45 ⇒ ∠AOC = 135°.

7. In triangle ABC, if ∠ABC = ∠ACB, and ray CD and BE are angle bisectors, then which angles are equal?
   A. ∠DCE and ∠EBD B. ∠BCD and ∠CBE
   C. ∠DCE and ∠CBE D. ∠EBD and ∠CBE (D)

Explanation : Angle bisectors divide equal angles into equal parts, so ∠EBD = ∠CBE.

8. If AB || CD and EF is a transversal, and ∠AEF = 70°, what is ∠EFD?
   A. 110° B. 70°
   C. 90° D. 60° (A)

Explanation : Interior angles on same side of transversal are supplementary ⇒ ∠EFD = 180° - 70° = 110°.

9. If ∠1 = ∠2 and ∠2 = ∠3, what can be said about ∠1 and ∠3?
   A. ∠1 < ∠3 B. ∠1 > ∠3
   C. ∠1 = ∠3 D. Cannot say (C)

Explanation : By transitive property of equality, ∠1 = ∠3.

10. If ∠QRS = 130° and ∠PQR = 110°, find ∠QRP when PQ || ST and QR is transversal.
    A. 120° B. 140°
    C. 110° D. Not possible (A)

Explanation : Use triangle angle sum and parallel line properties, ∠QRP = 180° - ∠PQR = 70°, ∠QRS = exterior angle = ∠PQR + ∠QRP ⇒ 130 = 110 + ∠QRP ⇒ ∠QRP = 20°.