Exercise 14 (A)

4) ∵ AOC is straight line.
∴ ∠AOB + ∠BOD + ∠DOC = 180°
∴ y + 150° − x + x = 180°
∴ y + 150° = 180°
∴ y = 180° − 150° = 30°
Hence, y = 30°

5) SQR is a straight line
∴ ∠SQT + ∠TQP + ∠PQR = 180°
∴ x + 70° + 20° − x + ∠PQR = 180°
∴ 90° + ∠PQR = 180°
∴ ∠PQR = 180° − 90° = 90°
Hence ∠PQR = 90°

6) p° + q° + r° = 180° (straight angle)
But p° = q° = r° (given)
∴ p° + p° + p° = 180°
∴ 3p° = 180° ∴ p° = $\frac{180°}{3}$ = 60°

Hence p° = q° = r° = 60°