**Conversions**

**Q1. Infix to Postfix**

1. a+b∗c+(d∗e)*a*+*b*∗*c*+(*d*∗*e*)
   * Postfix: abc∗+de∗+*abc*∗+*de*∗+
2. a+b∗(cd−e)(f+g∗h)−i*a*+*b*∗(*cd*−*e*)(*f*+*g*∗*h*)−*i*
   * Postfix: abcde−fgh∗+∗+i−*abcde*−*fgh*∗+∗+*i*−

**Q2. Infix to Prefix**

1. (A∗B)+(C∗D)(*A*∗*B*)+(*C*∗*D*)
   * Prefix: +∗AB∗CD+∗*AB*∗*CD*
2. (a+(b/c)∗(de)−f)(*a*+(*b*/*c*)∗(*de*)−*f*)
   * Prefix: −+a∗/bcdef−+*a*∗/*bcdef*

**Q3. Prefix to Postfix**

1. −a/bc−/ade−*a*/*bc*−/*ade*
   * Postfix: abc/−ade/−*abc*/−*ade*/−
2. ∗−a/bc−/ade∗−*a*/*bc*−/*ade*
   * Postfix: abc/−ade/−∗*abc*/−*ade*/−∗

**Q4. Postfix to Prefix**

1. ABC/−AK/L−∗*ABC*/−*AK*/*L*−∗
   * Prefix: ∗−A/BC−/AKL∗−*A*/*BC*−/*AKL*
2. abc/−ad/e−∗*abc*/−*ad*/*e*−∗
   * Prefix: ∗−a/bc−ade∗−*a*/*bc*−*ade*

**Q5. Postfix to Infix**

1. abc+de/∗−*abc*+*de*/∗−
   * Infix: a+b∗c−(d∗e)*a*+*b*∗*c*−(*d*∗*e*)
2. The given expression is invalid. There is a mistake in the expression.

**Q6. Prefix to Infix**

1. +9∗3/84+9∗3/84
   * Infix: (9+(3∗(8/4)))(9+(3∗(8/4)))
2. ∗/+12/42+35∗/+12/42+35
   * Infix: \((1 + 2) \* (4 / 2) + 3 + 5)

**Q7. Identify the Infix Expression**

The correct option is:

* abc∗+d+ab+cd+∗ce−f−*abc*∗+*d*+*ab*+*cd*+∗*ce*−*f*−

**Q8. Incorrect Statement**

The incorrect statement is:

* c) If the precedence of the operator is lower, pop two operands and evaluate

**Q9. Data Structure for Postfix to Infix Conversion**

The correct answer is:

* a) Stack