

INEQUALITY

Symbol

$>$ - Greater than

$<$ - Lesser than

$=$ - Equal to

$\geq$ - Greater than (or) Equal to

$\leq$ - Lesser than (or) Equal to

$\nlessgtr$ - Not Greater than (or) Equal to [Lesser than]

$\nlessgtr$ - Not Lesser than (or) Equal to [Greater than]

Type-1

* $A > B > C < D = E \geq F \leq G$ $\longrightarrow A > B > C < D E \geq F \leq G$

1. $A > C$ ✓
 2. $E \geq F$ ✓
 3. $A > G$ ✗
- } 1 + 2 Follow

* $G < L < M = N < P \leq Q \leq S$

✓ $G < N$

✗ 2. $M \leq S$

$G < L < M < N < P \leq Q \leq S$

$M < S$

Type-2

* $A > B > C, C < D \geq E, E \geq F = G$

✗ 1. $A < D$

✓ 2. $E \geq G$

✓ 3. $C < D$

$A > B > C < D \geq E \geq F = G$

$A > C$

$C < D$

* $Z \geq Y \geq X, X = W = U > V, V \leq O \leq R$

✓ 1. $Z \geq W$

✓ 2. $R \geq V$

$Z \geq Y \geq X = W = U > V \leq O \leq R$

$V \leq R$

$R \geq V$

Type-3

* $A > B > C, B \geq D \leq E, E > F < G = H$

✓ 1. $B \geq D$

✗ 2. $C > E$

$E \geq D \leq B > C$

* $G > H < I$, $G > F \geq E$, $F > A = B$

x1. $A > E$

$E \leq F > A$

x2. $I < F$

$I > H < G > F$

Type-4

* $A \geq B \geq C \geq E = F \geq G$

1. $A > F$

2. $A = F$

$A \geq F$

either 1 (or) 2 Follow

Either 1 (or) 2

$A \geq B \geq C \geq E = F \geq G$

$A \geq F$

* $A \leq G < H = I > J > K$

x1. $K = H$

2. $K < H$

$K \leq H$

x

$A \leq G < H = I > J > K$

$H > K$

$K < H$

Conclusion
 (a) Follow

Type-5

$$\begin{array}{l}
 A > B \not\geq C, \quad D \not\leq E = F, \quad E \not\geq D \not\leq C \\
 A > B < C \quad \downarrow \quad \downarrow \\
 \times 1. A < C \quad D > EF \quad E < D < C \\
 \checkmark 2. F < C
 \end{array}$$

$$\begin{array}{l}
 C > D > EF \\
 \swarrow \quad \searrow \\
 C > F \\
 \textcircled{F < C}
 \end{array}$$

Type-6

$$\begin{array}{l}
 @ \rightarrow > \\
 \# \rightarrow < \\
 * \rightarrow = \\
 \div \rightarrow \geq \\
 \$ \rightarrow \leq
 \end{array}$$

$$\begin{array}{l}
 A * B \# C \$ D \# E * F \\
 A = B < C \leq D < E = F \\
 \overbrace{AB < C \leq D < EF} \\
 \checkmark A < F \quad C < F \checkmark \\
 \quad \quad \quad C \leq F \times
 \end{array}$$

conclusion 1 Follow
 and Either (3)
 or (4) Follow

3. $C = D$

4. $C < D$

$C \leq D \checkmark$
 $\rightarrow$ Either (3)
 or (4)
 Follow

$G * F @ E \% D * B * A$

$G = F > E \geq D = B = A$

✓ 1. $A < G$

✗ 2. $A = G$

✓ 3. $E \geq D$

(1) and (3)

Follow

$G F > E \geq D B A$

$G > A$

$A < G$

