## Practice Sets on Reasoning Ability (Equality-Inequality)

**Directions (1 – 5): Study the following information and answer the questions below:**

P & Q – P is neither smaller than nor equal to Q
P@Q – P is neither greater than nor equal to Q
P*Q – P is not smaller than Q
P$Q – P is not greater than Q
P%Q – P is neither greater than nor smaller than Q

**1).** Statement: A*B, B&E, F&E, F*D
Conclusion: 1) A&E  2) A&D
   a) Only conclusion 1 follow
   b) Only conclusion 2 follow
   c) Either 1 or 2 follow
   d) Both follow
   e) Neither conclusion 1 nor 2 follow

**2).** Statements: A%B, B&C, C*D, D$E
Conclusion: 1) A & C 2) B * D
   a) Only conclusion 1 follow
   b) Only conclusion 2 follow
   c) Either 1 or 2 follow
   d) Both follow
   e) Neither conclusion 1 nor 2 follow

**3).** A % B, C & B, C * D, E@D
Conclusions :  1) C % D 2) C & D
   a) Only conclusion 1 follow
   b) Only conclusion 2 follow
   c) Either 1 or 2 follow
   d) Both follow
   e) Neither conclusion 1 nor 2 follow

**4).** A&B, B @ C, C $ D, E &D
Conclusion : 1) E&A 2) B*E
   a) Only conclusion 1 follow
   b) Only conclusion 2 follow
   c) Either 1 or 2 follow
   d) Both follow
   e) Neither conclusion 1 nor 2 follow

**5).** A*B, B$C, C&D, D*E
Conclusion:1) A&D 2) E@C
   a) Only conclusion 1 follow
   b) Only conclusion 2 follow
   c) Either 1 or 2 follow
   d) Both follow
   e) Neither conclusion 1 nor 2 follow

**Directions (6 – 10): Answer the following questions with these options:**
   (A) only 1st follows
   (B) only 2nd follows
   (C) either 1st or 2nd

(D) neither 1st nor 2nd

(E) both 1st and 2nd

**6).** Statements: K > B ≤ G = A, G ≤ P ≤ Q, A ≤ M

Conclusions:

I. Q > M

II. Q ≤ M

**7).** Statements: Q ≥ P > K, P > F < C, A > W

Conclusions:

I. Q > F

II. A > C

8). **Statements: Q > V < B ≤ P, A ≤ M ≤ V, G < M**

Conclusions:

I. P > G

II. A < Q

**9).** Statements: L > P, P < N, N ≥ A

Conclusions:

I. A < P II. L > N

**10).** Statements: K ≥ T ≥ J, R < L, L > O

Conclusions:

I. O > T

II. K > L

**11).** What should come in place of question mark in the expression

P>Q ? R < T < S so as to make the expressions P>R and S>Q always true?

    a) =

    b) >

    c) <

    d) >=

    e) None of these

**12).** What should come in place of question mark in the expression A = B >C ? D< E = F so as to make the expression F>C always true?

    a) >

    b) =

    c) >=

    d) <=

    e) both b and d

**13).** What should come in place of question mark to make B> D always true?

A = B > C ? D <E

    a) >

    b) <

    c) >=

    d) < =

    e) both a and c

**14).** In which of these expressions 'S > V' be definitely false?

    a) S>P≥Q=G≥R>V

    b) P<A≤S≤T;V≥O>T

    c) V≤A≤L=R<S

d) S>C>=F≤H; V<F

e) S>T=O≥P; V<J=P

**15).** Which of the following symbols should be placed in the blank spaces respectively(in the same order from left to right) in order to complete the given expression in such a manner that both 'D>S' as well as 'E≤B' definitely holds true? B _ A _ S _ E _ D

a) >, ≥, <, =

b) >, >, ≥, <

c) ≥, ≥, ≥,≤

d) ≥, =, ≥,<

e) Other than those given as options

**Answers:**

**1)a  2)a  3)c  4)e  5)b  6)c  7)a  8)e  9)d  10)d  11)a  12)e  13)e  14)b  15)d**

Solutions:

**1. A)** A>=B>E<F>=D (A >E directly follow while A>D, not follow for all values of A,D)

**2. A)** A = B > C >=D<=E (A>C directly follows while B>=D doesn't follow as B is always greater than D)

**3. C)** A = B <C >=D>E (C>D and C=D)

**4. E)** A>B<C<=D<E

(E>A doesn't follow for all values of E,A and B>=E, both doesn't follow for all values of E, B )

**5. B)** A>=B<=C>D>=E (A>D doesn't follow for all value of A and D and E<C always follow)

**6. C)** Q ≥ G = A ≤ M, this gives both Q and M less than equal to F

So either Q will be > M or Q will be ≤ M

**7. A)** Q ≥ P > F, so Q > F

A > Q ≥ P > F < C, so relation cant be determined between A and C

**8. E)** P > V ≥ M > G, so P > G

A ≤ V < Q, so P < Q

**9. D)** A ≤ N > P, so no relationship between A and P

L > P < N, both L and N less than P so no relationship between L and N

**10. D)** O < L > R ≤ T, so relation cant be determined between O and T

K ≥ R < L, so relation can't be determined between K and L

**11. A)** P>Q = R< T < S (Both expression true)

**12. E)** A = B >C = D< E =F and A = B >C <= D< E =F (F>C true in both cases)

**13. E)** A = B >C >D <E and A = B>C>=D<E in both cases B will be greater than D

**14. B)** P<A≤S≤T;V≥O>T

**15. D)** ≥, =, ≥,<