

Inequality - Solved Examples

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

$R*S$ suggests that R is not higher than S

$R@S$ suggests that R is neither shorter than nor equal to S

$R!S$ suggests that R is neither higher than nor equal to S

$R\$S$ suggests that R is neither shorter nor higher than S

$R\#S$ suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 1 – Statements: $P@Q$, $Q!R$, $R\$S$

Conclusions:

I. $S\#P$

II. $S\#Q$

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - D

Explanation

Neither S is higher than or equal to P nor S is higher than or equal to Q. Hence option D is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 2 – Statements: A@B, B!C, C\$D

Conclusions:

I. D@B

II. D*A

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - A

Explanation

Here only D is higher than B. Hence option A is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 3 – Statements: P#S, S@R, P*N

Conclusions:

I. N\$R

II. P@R

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - B

Explanation

Here only P is higher than R. Hence option b is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 4 – Statements: N\$S, S@R, R#Q, Q#T

Conclusions:

I. N@R

II. R#T

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - E

Explanation

Both the conclusions are valid, hence option E is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 5 – Statements: P!S, S#N, N@R, P!Q

Conclusions:

I. Q@S

II. S@R

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - B

Explanation

Only S is higher than R is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 6 – Statements: C\$D, D@E, D!G, C#P, P@N

Conclusions:

I. D#P

II. C!G

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - E

Explanation

Both the conclusions are valid. Hence option E is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

$R * S$ suggests that R is not higher than S

$R @ S$ suggests that R is neither shorter than nor equal to S

$R ! S$ suggests that R is neither higher than nor equal to S

$R \$ S$ suggests that R is neither shorter nor higher than S

$R \# S$ suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 7 – Statements: $Z \$ R$, $R * Q$, $Q \# P$, $P ! K$

Conclusions:

I. $Z \# Q$

II. $P ! Z$

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - D

Explanation

Neither I nor II is valid. Hence option D is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

$R * S$ suggests that R is not higher than S

$R @ S$ suggests that R is neither shorter than nor equal to S

$R ! S$ suggests that R is neither higher than nor equal to S

$R \$ S$ suggests that R is neither shorter nor higher than S

$R \# S$ suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 8 – Statements: $P \# S$, $S @ R$, $P * N$

Conclusions:

I. $N \$ S$

II. $N @ S$

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - C

Explanation

Here either N is higher than or equal to S. Hence option C is chosen.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

$R * S$ suggests that R is not higher than S

$R @ S$ suggests that R is neither shorter than nor equal to S

$R ! S$ suggests that R is neither higher than nor equal to S

$R \$ S$ suggests that R is neither shorter nor higher than S

$R \# S$ suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 9 – Statements: $M \# Q$, $Q \$ Z$, $M * N$

Conclusions:

I. $N \$ Z$

II. $M @ Z$

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - B

Explanation

Here only M is higher than Z. Hence option B is correct.

In the following question, some symbols are used with the letters having the following meanings as illustrated below –

R*S suggests that R is not higher than S

R@S suggests that R is neither shorter than nor equal to S

R!S suggests that R is neither higher than nor equal to S

R\$S suggests that R is neither shorter nor higher than S

R#S suggests that R is not shorter than S

Now, in each of the following questions, assuming the given statements to be valid, find out which of the two conclusions I and II given below them is /are definitely valid.

Q 10 – Statements: A#B, B@C, A*D

Conclusions:

I. D\$B

II. D@B

Give answer –

A - If only conclusion I is valid.

B - If only conclusion II is valid.

C - If either conclusion I or II is valid.

D - If neither conclusion I or II is valid.

E - If both the conclusion I and II are valid.

Answer - C

Explanation

Here either D is higher than B or equal to B. Hence option C is chosen.