

Question 1: The contrapositive of the inverse of $p \Rightarrow \sim q$ is

Question 2: Which of the following is the contrapositive of if two triangles are identical, then these are similar??

- A) if two triangles are not similar, they are not identical
- B) If two triangles are not identical, then these are not similar
- C) If two triangles are not identical, then these are similar
- D) If two triangles are not similar, then these are identical

Solution:

The inverse of $p \Rightarrow \sim q$ is $\sim p \Rightarrow q$

The contrapositive of $\sim p \Rightarrow q$ is $\sim q \Rightarrow p$. [Because the contrapositive of $p \Rightarrow q$ is $\sim q \Rightarrow p$.]

Solution:

Consider the following statements

p: Two triangles are identical.

q: Two triangles are similar.

Clearly, the given statement in symbolic form is $p \Rightarrow q$.

Therefore, its contrapositive is given by $\sim q \Rightarrow \sim p$

Now,

$\sim p$: two triangles are not identical.

$\sim q$: two triangles are not similar.

Therefore, $\sim q \Rightarrow \sim p$: If two triangles are not similar, then these are not identical.

