

Proof – Q6 [Problem/E](4/10/21)

Let A be " $x = 3$ ", and let B be " $x^2 = 9$ "

Which of the following statements are true?

A is a necessary but not sufficient condition for B

A is a sufficient but not necessary condition for B

B is a necessary but not sufficient condition for A

B is a sufficient but not necessary condition for A

A (is true) only if B (is true)

B (is true) only if A (is true)

Solution

A is a necessary but not sufficient condition for B [**false**]

A is a sufficient but not necessary condition for B [**true**]

B is a necessary but not sufficient condition for A [**true**]

B is a sufficient but not necessary condition for A [**false**]

A (is true) only if B (is true) [**true**]

B (is true) only if A (is true) [**false**]