

Biconditional Statements -TEST

1.	Given:	a: $y - 6 = 9$
		b: $y = 15$
	Problem:	The biconditional $a \leftrightarrow b$ represents which of the following sentences?

- If $y - 6 = 9$, then $y = 15$.
- $y - 6 = 9$ if and only if $y = 15$.
- If $y = 15$, then $y - 6 = 9$.
- None of the above.

RESULTS BOX:

2.	Given:	r: 11 is prime.
		s: 11 is odd.
	Problem:	The biconditional $r \leftrightarrow s$ represents which of the following sentences?

- If 11 is prime, then 11 is odd.
- If 11 is odd, then 11 is prime.
- 11 is prime iff 11 is odd.
- None of the above.

RESULTS BOX:

3.	Given:	$x \rightarrow y$
		$y \rightarrow x$
	Problem:	If both of these statements are true then which of the following must also be true?

- $(x \rightarrow y) \wedge (y \rightarrow x)$
- $x \leftrightarrow y$

- x iff y
- All of the above.

RESULTS BOX:

4.

Given:	$m \leftrightarrow n$ is biconditional
Problem:	Which of the following is a true statement?

- m is the hypothesis
- m is the conclusion
- n is a conditional statement
- n is a biconditional statement

RESULTS BOX:

5. Which of the following statements is biconditional?

- I am sleeping if and only if I am snoring.
- Mary will eat pudding today if and only if it is custard.
- It is raining if and only if it is cloudy.
- None of the above.

RESULTS BOX: