

Advanced Logical Statement Practice

1. Determine whether the following statement is compound:

'If it rains today, then the game will be cancelled or postponed.'

2. Identify whether this statement is compound:

'7 is a prime number and 12 is divisible by 3.'

3. Consider the statement: 'If $x > 3$, then $x^2 > 9$.'

Is this a compound statement? Explain why or why not.

4. Decide whether this is a compound statement:

'The triangle is equilateral if and only if all its angles are equal.'

5. Classify the following statement:

' $5 + 2 = 7$ or 9 is not an even number.'

Is it a compound statement?