15-E-14 Identify state and path functions

Which of the following statements is NOT true?

"An example of a state function is temperature ". This statement is correct, temperature only depends on the state and not on the path and is therefore a state function.

"An example of a path function is heat transfer". This is statement correct, the heat transfer depends on the path and is not a property of the state. Therefore it is a path function.

"The cyclic integral of a path function is always zero". This statement is NOT correct, the cyclic integral of a path function return a value that is unequal to zero. So it is the correct answers.

"The total differential of a state function x is denoted dx". This statement is correct. The total differential of a state function, x is denoted by dx.

"The symbol ∂ is used for a partial derivative.".This is correct. ∂ is used to denote a partial derivative.