

Multiple Choice Quiz: Section 3.5: Coefficients of Thermal Expansion

_____ 1. The longitudinal coefficient of thermal expansion of a unidirectional lamina is a function of the following (check all that apply)

- A Density of fiber and matrix
- B Young's moduli of fiber and matrix
- C Fiber and matrix volume fraction
- D Poisson's ratio of fiber and matrix
- E Coefficient of thermal expansion of fiber and matrix

_____ 2. For a lamina exposed to changes in temperature, it is generally assumed that

- A the change in temperature is the same for the fiber and the matrix.
- B the change in temperature is greater in the fiber than in the matrix.
- C the change in temperature is greater in the matrix than in the fiber.

_____ 3. The transverse thermal expansion coefficient is a function of the following (check all that apply)

- A Young's moduli of fiber and matrix
- B Fiber and matrix volume fraction
- C Density of fiber and matrix
- D Coefficient of thermal expansion of fiber and matrix
- E Poisson's ratio of fiber and matrix