← Back | **Lecture Comprehension, Introduction to Rigid-Body Motions (Chapter 3 through 3.1)**
Practice Quiz • 30 min • 4 total points

English ⌄   Due Aug 23, 11:59 PM +0530

✓ **Congratulations! You passed!**

Grade received 100%   To pass 80% or higher

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1. Which do we typically use to represent the C-space of a rigid body?   1 / 1 point

  ○ Explicit parametrization (minimum number of coordinates).

  ● Implicit representation.

  > ✓ **Correct**
  > We use rotation matrices and transformation matrices, which use more variables subject to constraints, to eliminate singularities in the representation of orientation and to allow linear algebraic operations for important calculations.

2. By the right-hand rule, which fingers of your right hand correspond to the x, y, and z axes of a coordinate frame,   1 / 1 point
   respectively?

  ○ Thumb, index, middle

  ○ Middle, index, thumb

  ● Index, middle, thumb

  > ✓ **Correct**

3. When your thumb points along an axis of rotation, positive rotation about the axis is defined by the direction your   1 / 1 point
   fingers curl if you use which thumb?

  ● Right thumb

  ○ Left thumb

  > ✓ **Correct**

4. When we refer to a frame attached to a moving body, we always consider a stationary frame {b}, because   1 / 1 point

  ○ the motion of all other frames is expressed relative to {b}.

  ● {b} is the stationary frame that is coincident (at a particular instant) with the frame attached to the moving
     body.

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