Quiz 3

- Due Feb 18 at 11:59pm
- Points 5
- Questions 5
- Available until Feb 18 at 11:59pm
- Time Limit None

Instructions

You have one attempt.

Questions might have more than one correct answer.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	6 minutes	4.67 out of 5

Correct answers will be available on Feb 19 at 12am.

Score for this quiz: 4.67 out of 5
Submitted Feb 17 at 12:19pm
This attempt took 6 minutes.

PartialQuestion 1
0.67 / 1 pts
A 3-by-3 rotation matrix R can normally be parametrized using:

- [x] 4 quaternions.
- [x] 3 Euler angles.
- [ ] 3 scalars representing the components of the axis of rotation vector and 1 scalar representing the rotation about such axis.
- [ ] 3 quaternions.

Question 2
1 / 1 pts
What are the names of the Euler angles corresponding to a 3-2-1 rotation sequence?

- [ ] Heading Angle
- [ ] Argument of periapsis

- [ ] Right ascension of the ascending node
- [ ] Banking Angle
- [x] Roll
- [x] Pitch
- [ ] Flight Path Angle
- [x] Yaw
- [ ] Inclination

Question 3

1 / 1 pts

Given a 3-by-3 rotation matrix, one can always find a unique set of Euler angles that parametrizes it.

- ( ) True
- (•) False

Question 4

1 / 1 pts

Given a set of 3 Euler angles, one can always compute the corresponding 3-by-3 rotation matrix.

- (•) True
- ( ) False

Question 5

1 / 1 pts

What is/are the value(s) of the Euler angles that correspond to a singularity?

- [ ] Roll equal to +180 deg
- [ ] Yaw equal to +90 deg
- [ ] Yaw equal to 0 deg
- [x] Pitch equal to -90 deg
- [ ] Roll equal to -180 deg
- [ ] Pitch equal to 180 deg
- [x] Pitch equal to +90 deg

Quiz Score: 4.67 out of 5