Are 3D rotations commutative?

Commutative law

x * y = y * x
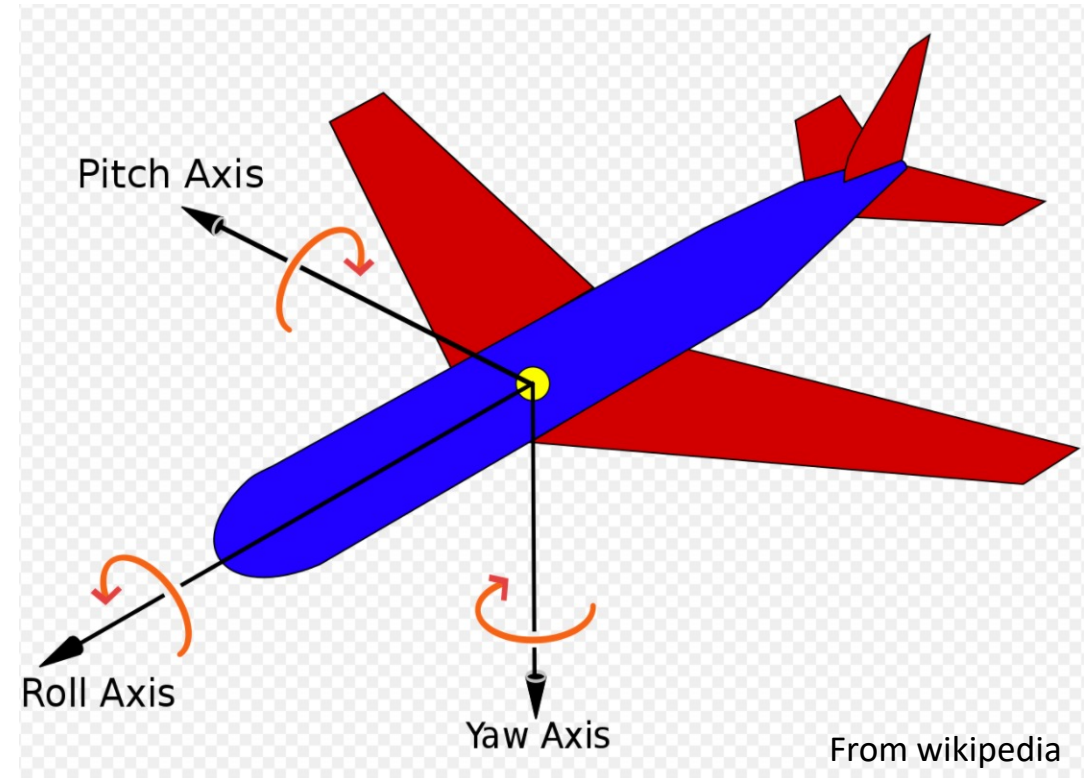
2 + 5 = 5 + 2 = 7

Addition is commutative.

Question

Does it matter what order one implements rotations? i.e. Are rotations commutative?

Try it with 2 airplanes

Airplane 1: 90 degree roll, pitch, yaw

Airplane 2: 90 degree yaw, pitch, roll

Aircraft principal axes