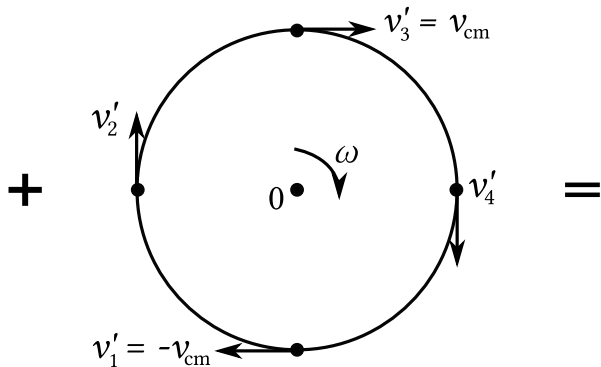
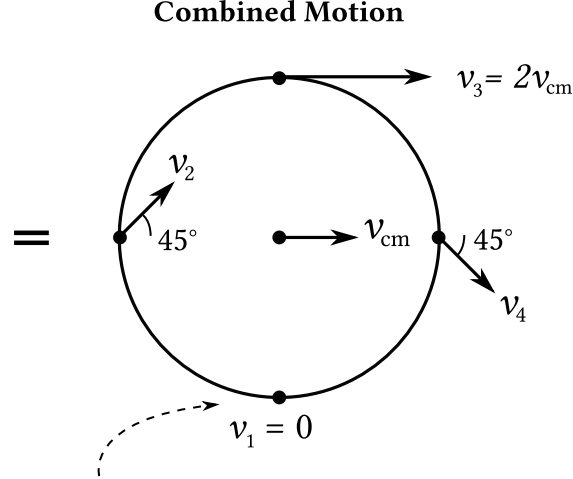


Translation of the center of mass



Rotation around the center of mass

For rolling without slipping,
speed at rim = v_{cm}



Instantaneously at rest where wheel
contacts ground