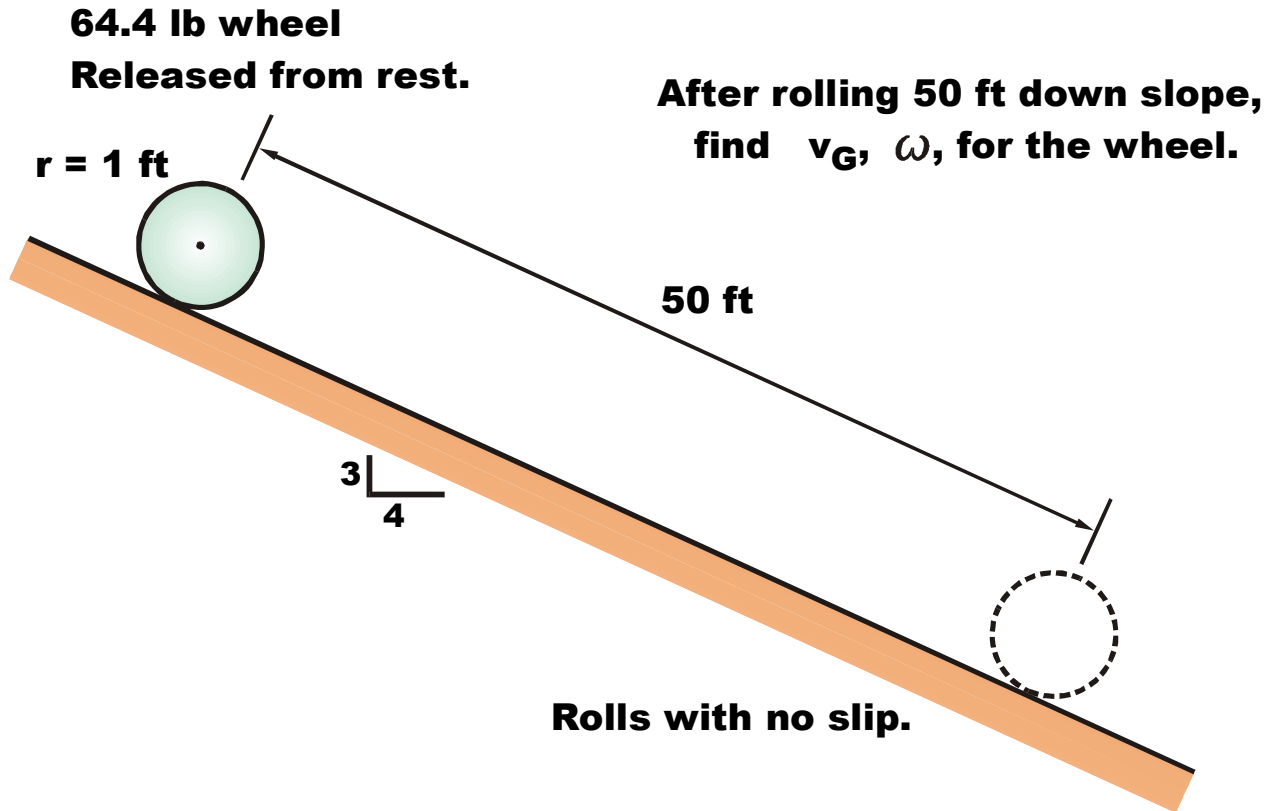# Rigid Body Work Energy: Example Problem 1

A 64.4 lb wheel (radius = 1 ft) is released from rest on a 3-4-5 slope. It rolls without slip 50 ft down the slope. At that point, please determine the wheel's: (a) v_G.   (b) ω.

64.4 lb wheel
Released from rest.

After rolling 50 ft down slope,
find v_G, ω, for the wheel.

r = 1 ft

50 ft

3
4

Rolls with no slip.

64.4 lb wheel
Released from rest.

After rolling 50 ft down slope,
find v_G, ω, **for the wheel.**

r = 1 ft

50 ft

3⌐
4

Rolls with no slip.