A boy of mass 20 kg stands 3m from the center of a merry-go-round. Find the angular momentum of the boy if his speed is 4 m/s when the ride is in motion.

Given:

Mass of the boy:	m = 20 kg
Distance of boy from center:	r = 3 m
Speed of the boy:	v = 4 m/s

Determine: angular momentum of boy: L

Use formula:

$L = mrv$----------(1)

Substituting for m, r & v in (1):

$$\mathbf{L = 20 \times 3 \times 4 = 240\ kgm^2 / s}$$

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