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Question: A ball is attached to a pole by a string. The ball is swinging in a circle, and the pole is rotating freely, so that the part of the pole where the string is attached is always facing the ball. Now you stop the pole rotating, so the string starts wrapping around the pole. What happens to the speed of the ball? (ignore effects due to gravity, assume the ball is a point mass)

A1: It stays the same

A2: It speeds up

Arguments for A1

No arguments

Arguments for A2

1

Question: In a scenario where there *is* gravity, the ball will speed up in the tangential direction

A1: 50%

A2: Yes

2

Question: Conditioned on 1=Yes it must also speed up here

A1: 50%

A2: Yes