

Physics Problems: #4

For Lucas

December 13, 2014

The Ferret¹

A small ferret is put into a circular wheel-cage, which has a frictionless central pivot. A horizontal platform is fixed to the wheel below the pivot as seen in Fig. 1. Initially, the ferret is at rest at one end of the platform.

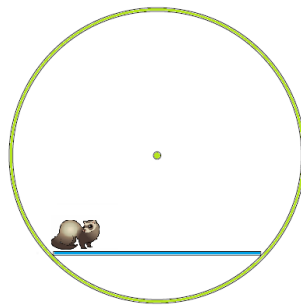


Figure 1: Ferret in a wheel.

When the platform is released the ferret starts running, but, because of the ferret's motion, the platform and wheel remain stationary. *Determine how the ferret moves.*

Bonus

Find out who dies in Fig. 2.

[1] Gnädig, Honyek & Riley. *200 Puzzling Physics Problems*. Problem 13.

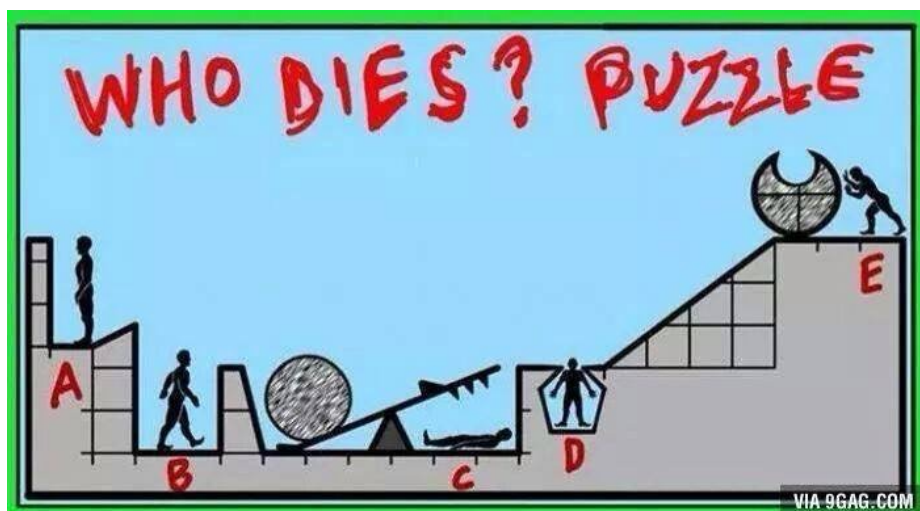


Figure 2: Who dies?.