

Line of Gravity

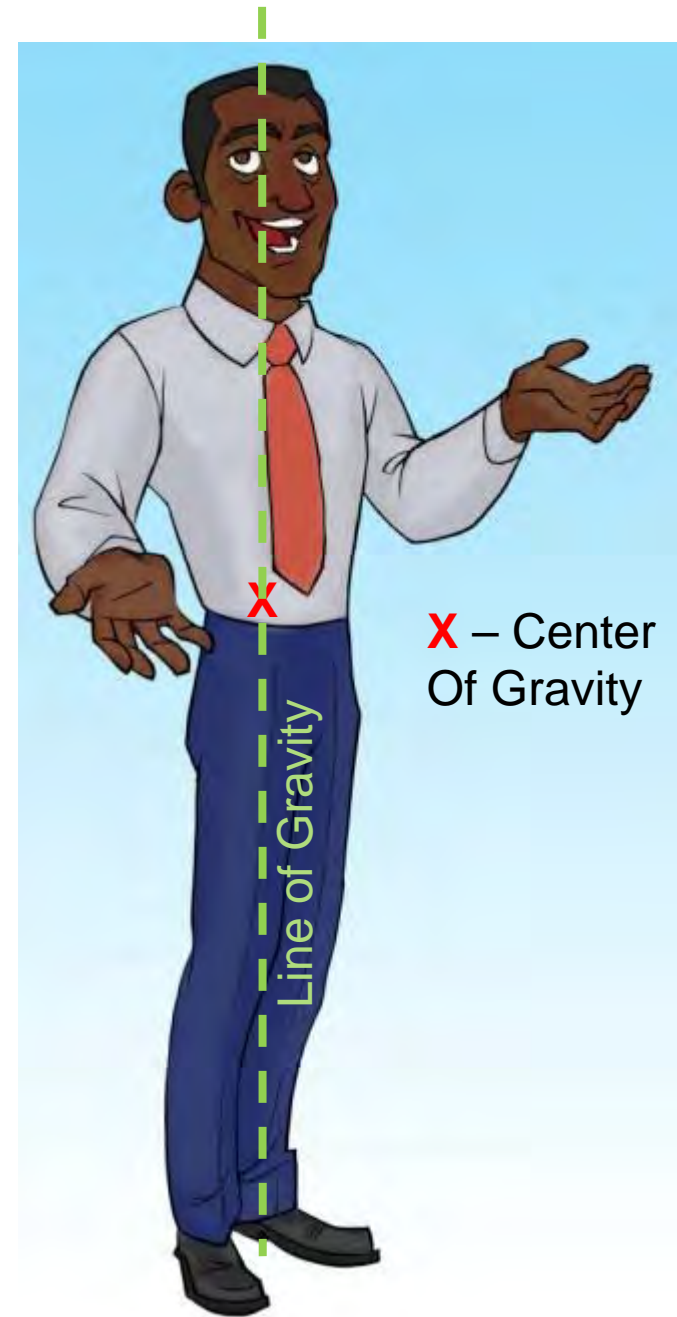


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Line of Gravity

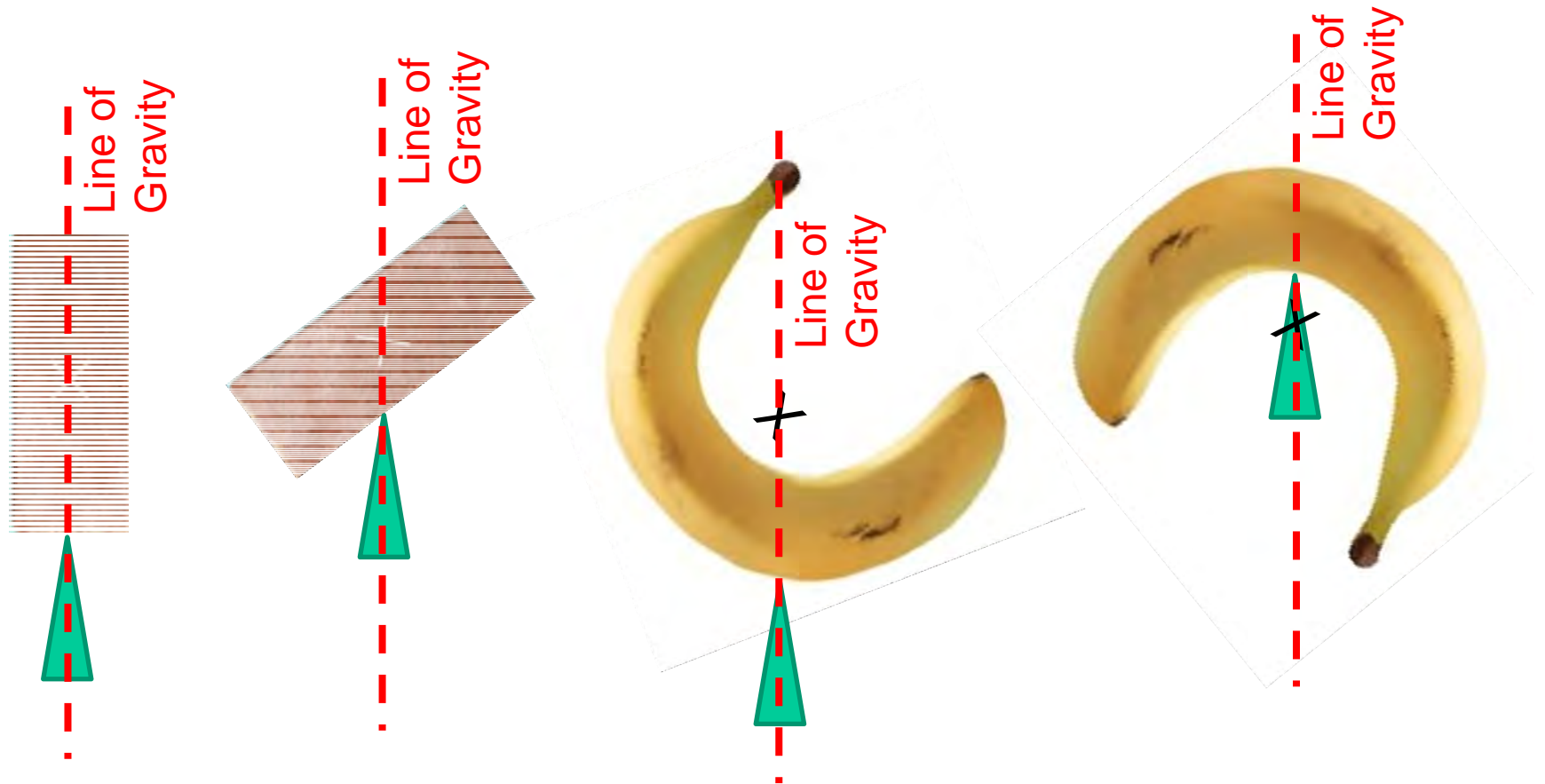
The line of gravity is an imaginary vertical line that extends upward and downward from the center of gravity.

When a person is standing fairly straight, the line of gravity is a plumb line that passes through the pit of the neck.



Balance & Line of Gravity

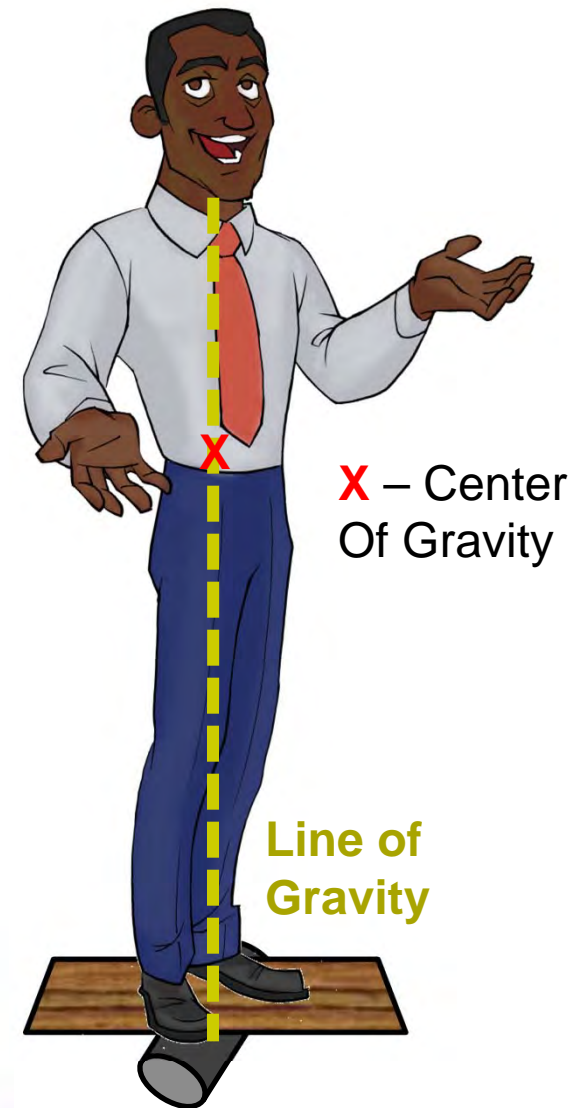
The line of gravity passes through a pivot.



Balance Board

One way to think about the line of gravity is to imagine the character standing on a balance board.

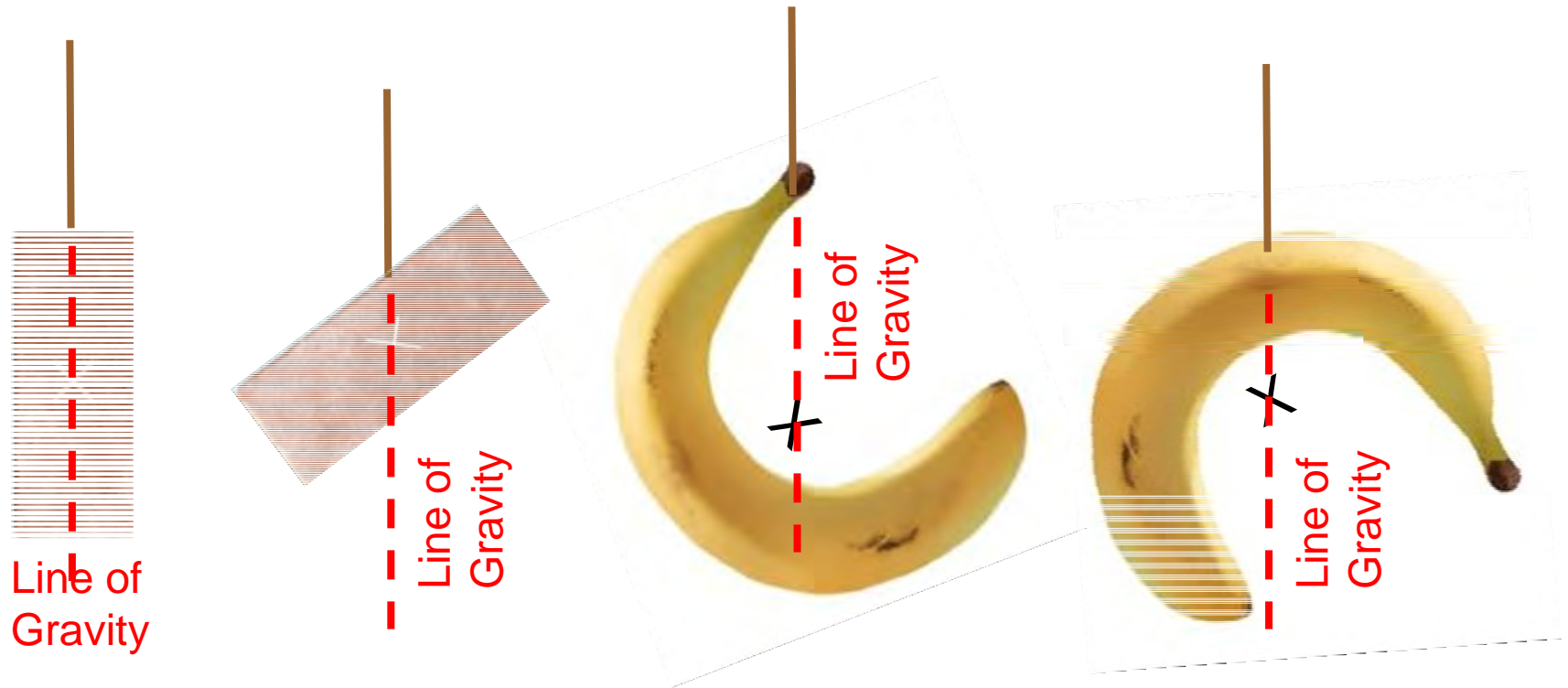
Line of gravity will pass through the board's roller.



Hanging & Line of Gravity

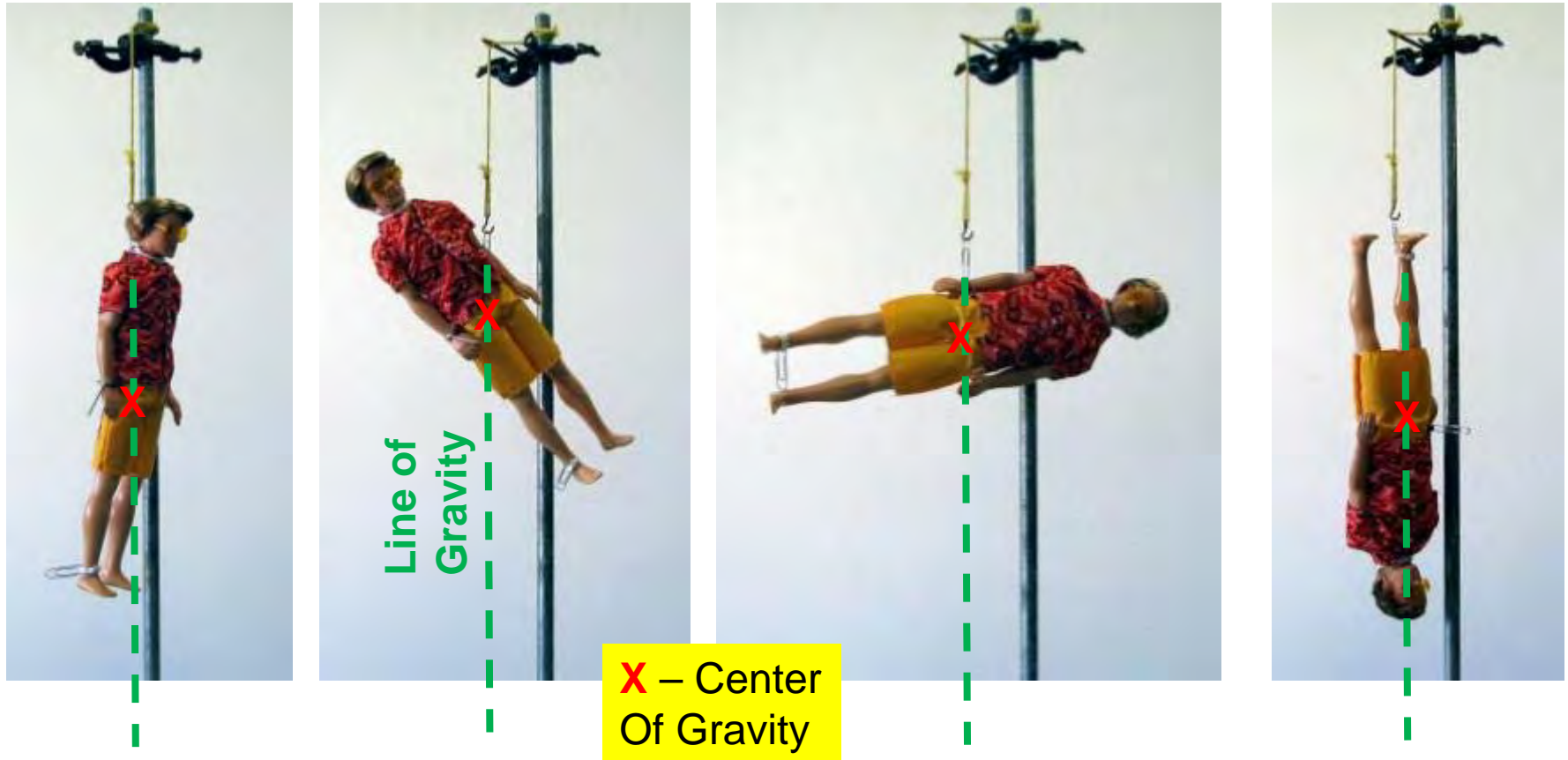
The object will hang such that the CG is directly below the point of suspension.

Line of gravity is vertical line from that point.



Doll's Center of Gravity

This doll has a CG that's a little lower than a human's because its head is hollow.



Poses & Line of Gravity

The center of gravity shifts upward when the arms are raised.

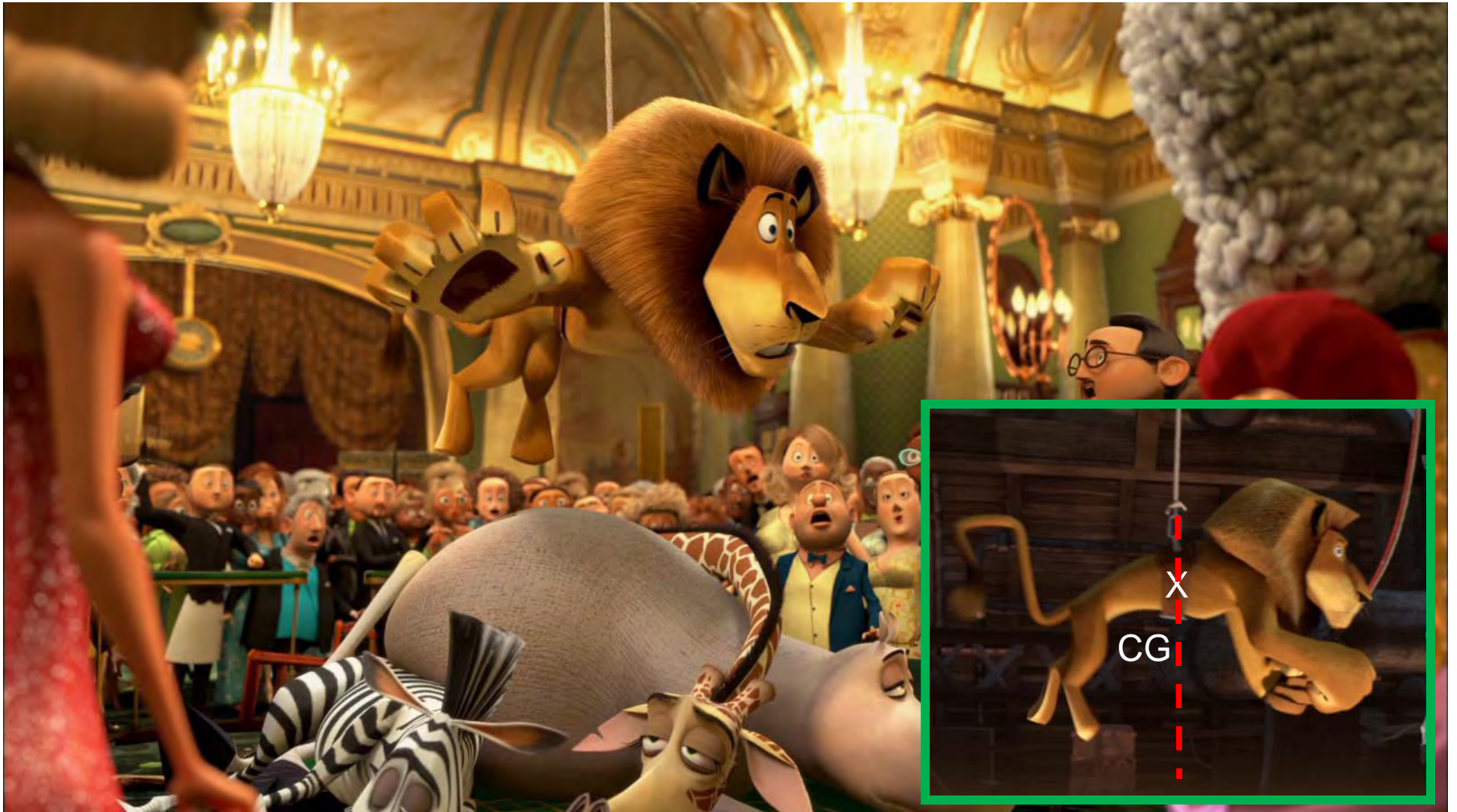


Hanging & Line of Gravity



Madagascar 3: Europe's Most Wanted

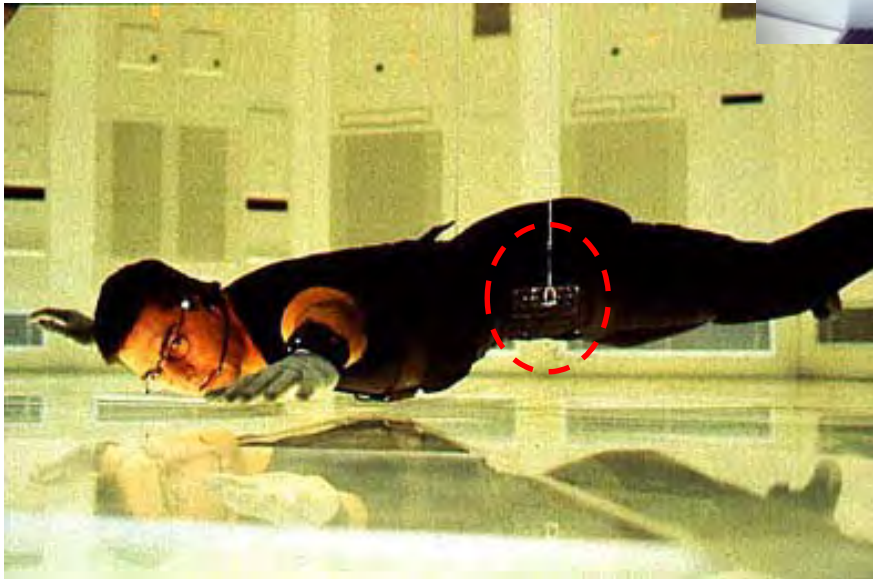
Hanging & Line of Gravity



Hanging & Line of Gravity

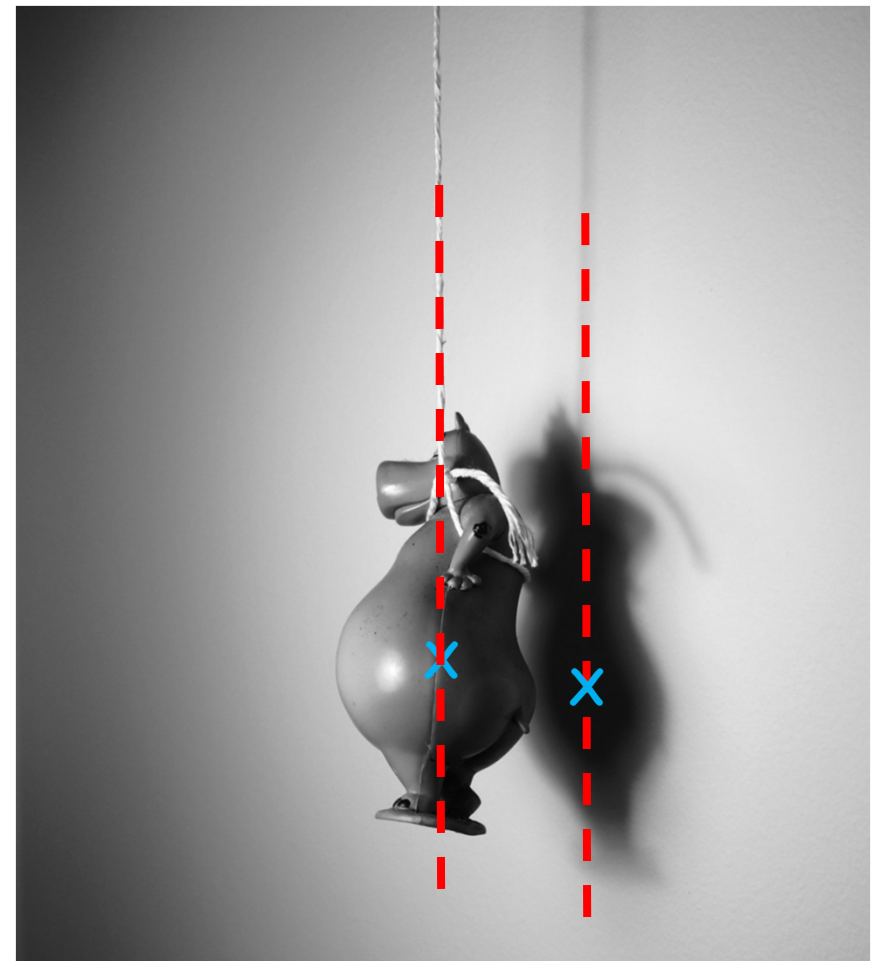
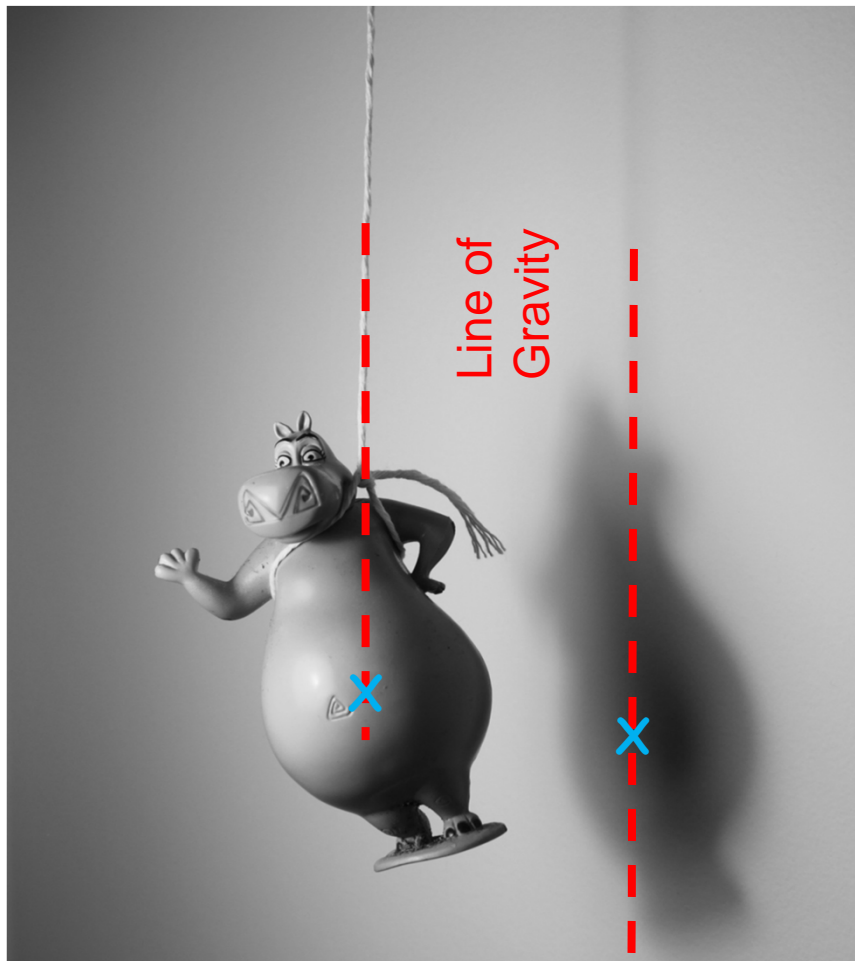
Tom Cruise's harness attaches just above his hips, where his center of gravity is located.

Mission Impossible (1996)



Shadows & Line of Gravity

A character and its shadow should have consistent centers and lines of gravity.



Summary

- Line of gravity is an imaginary vertical line that extends upward and downward from the center of gravity.
- Since the center of gravity depends on a character's weight distribution and pose, so does the character's line of gravity.
- The line of gravity passes through the rope holding a character that's hanging.