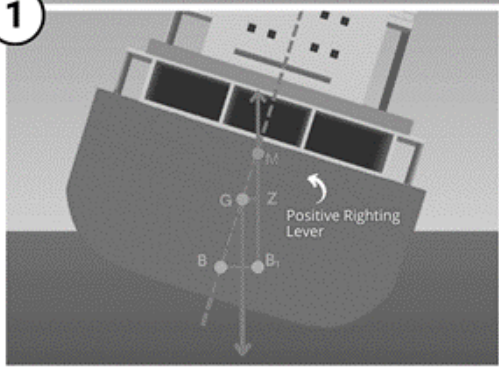


Vessel Stability Infographic

STATES OF STABILITY

1



STABLE EQUILIBRIUM

The center of gravity (G) must be below the metacenter (M) for a ship to be in stable equilibrium

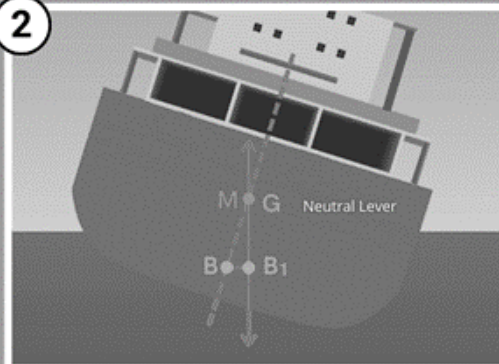
This results in a moment that brings the ship back to its original upright position.

NEUTRAL BUOYANCY

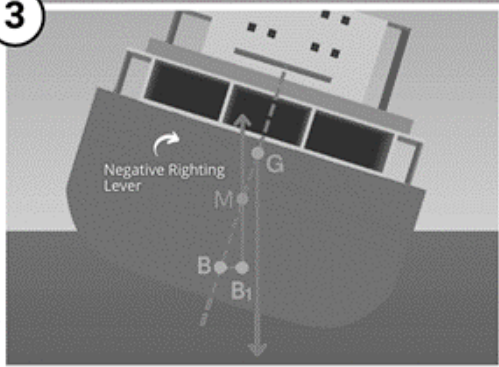
The centre of gravity (G) and the metacentre (M) coincide or nearly coincide.

This causes the ship to heel over to one side and will at that angle of heel i.e angle of loll

2



3



UNSTABLE EQUILIBRIUM

In this state, the centre of gravity (G) is above the metacentre (M).

This is a dangerous state and too much heel would capsize the ship

Source: <https://maritimesa.org>