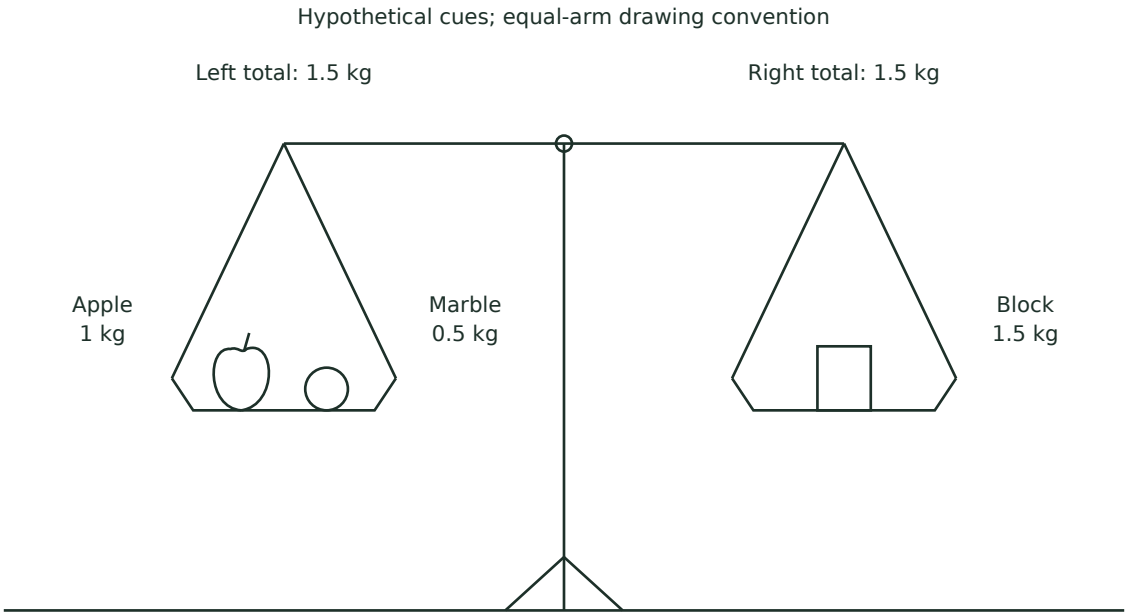
Draw a Balance Scale with Three Weighted Objects

EXERCISE 1 / ANSWERS

Draw a balance scale with an apple at 1 kg and a marble at 0.5 kg in the left pan, and a block at 1.5 kg in the right pan. State whether the beam is level or tilted.



Left total: 1 kg + 0.5 kg = 1.5 kg. Right total: 1.5 kg. The totals are equal, so the beam is level and both pans are at the same height.

Why: Add the left cues first, then compare with the right cue using the same unit. Equal totals mean a level beam.

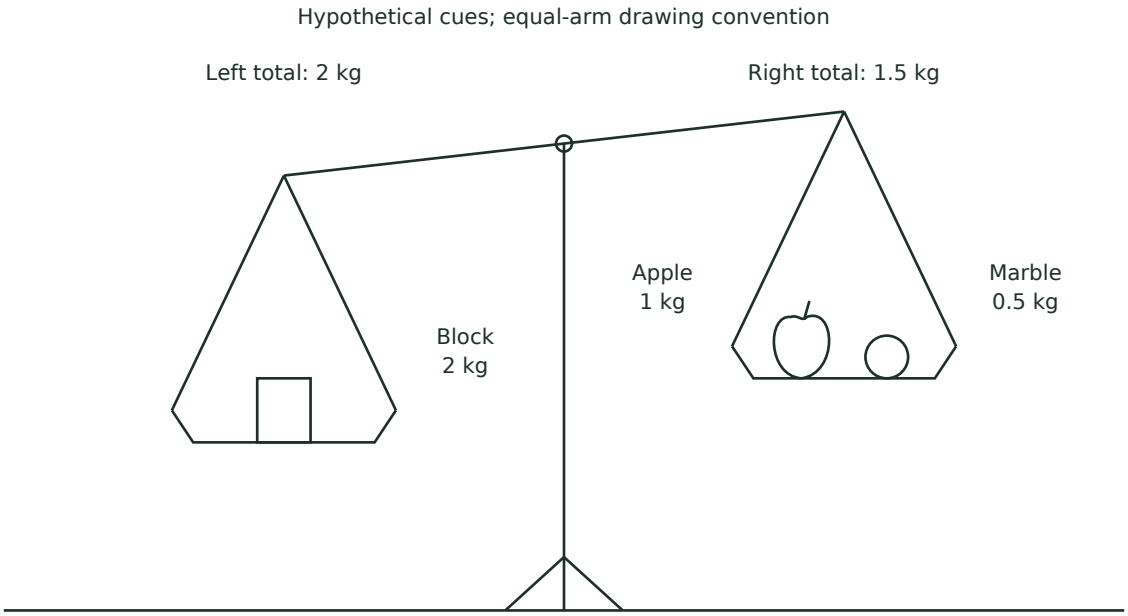
Check: Re-add each side and confirm the beam is drawn level with pans at equal height.

All three outlines touch their pan floors. Cue labels are beside the objects; left/right refer to the viewer. The beam has equal arms about the marked center, and the heavier side is lower. Illustration not at actual size.

Draw a Balance Scale with Three Weighted Objects

EXERCISE 2 / ANSWERS

Draw a balance scale with a block at 2 kg in the left pan and an apple at 1 kg plus a marble at 0.5 kg in the right pan. State which side is heavier and show the tilt.



Left total: 2 kg. Right total: 1 kg + 0.5 kg = 1.5 kg. The left side is heavier, so tilt the beam slightly left and lower the left pan.

Why: Compare totals after adding the right cues. The larger total is on the left, so the beam tilts left.

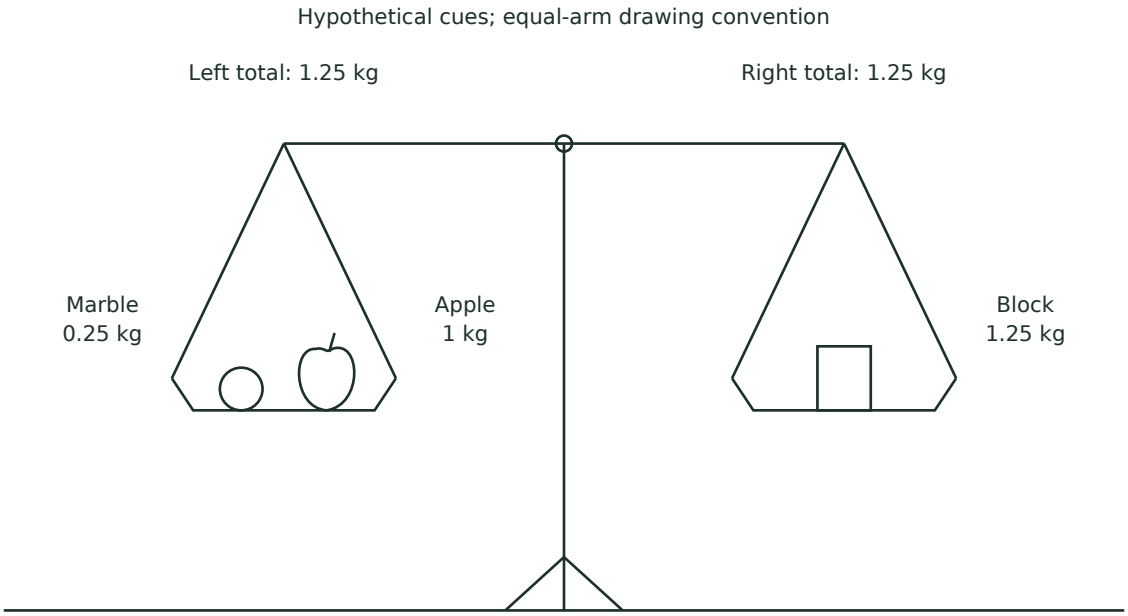
Check: Confirm the left total is greater and that the left pan is drawn lower than the right pan.

All three outlines touch their pan floors. Cue labels are beside the objects; left/right refer to the viewer. The beam has equal arms about the marked center, and the heavier side is lower. Illustration not at actual size.

Draw a Balance Scale with Three Weighted Objects

EXERCISE 3 / ANSWERS

Draw a balance scale with a marble at 0.25 kg and an apple at 1 kg in the left pan, and a block at 1.25 kg in the right pan. State whether the scale is balanced.



Left total: 0.25 kg + 1 kg = 1.25 kg. Right total: 1.25 kg. The scale is balanced; draw the beam level.

Why: Convert all cues to the same unit, add the left side, and compare with the right side. Equal totals mean balance.

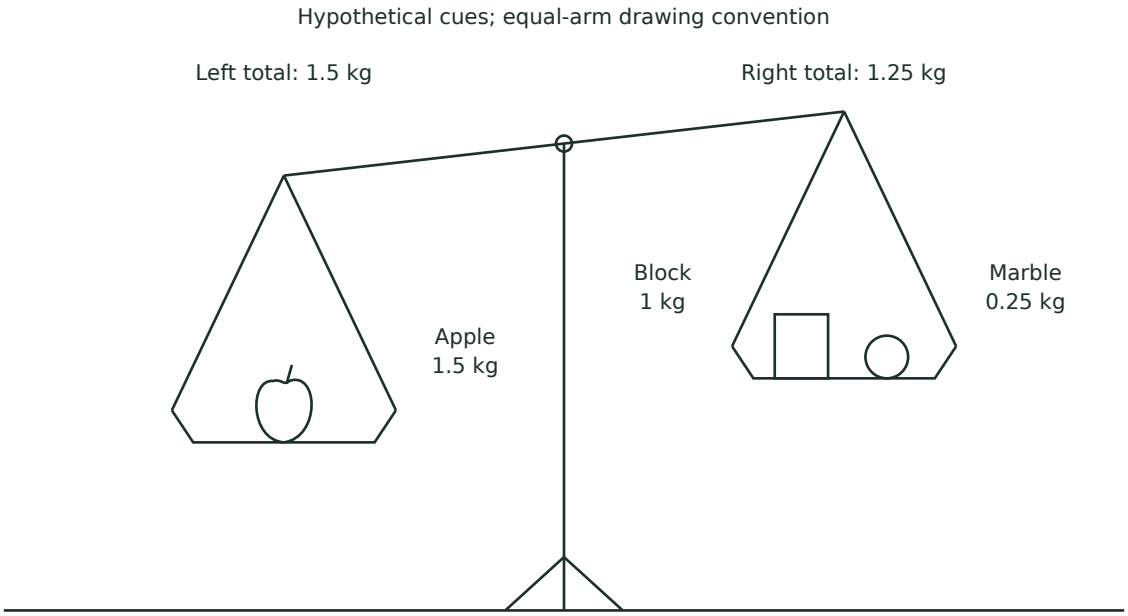
Check: Recheck the addition and confirm the beam is level with equal pan heights.

All three outlines touch their pan floors. Cue labels are beside the objects; left/right refer to the viewer. The beam has equal arms about the marked center, and the heavier side is lower. Illustration not at actual size.

Draw a Balance Scale with Three Weighted Objects

EXERCISE 4 / ANSWERS

Draw a balance scale with an apple at 1.5 kg in the left pan and a block at 1 kg plus a marble at 0.25 kg in the right pan. State which side is heavier and show the tilt.



Left total: 1.5 kg. Right total: 1 kg + 0.25 kg = 1.25 kg. The left side is heavier, so tilt the beam slightly left and lower the left pan.

Why: Add the right cues and compare with the left cue. The left total is larger, so the beam tilts left.

Check: Confirm the left total exceeds the right total and that the left pan is lower.

All three outlines touch their pan floors. Cue labels are beside the objects; left/right refer to the viewer. The beam has equal arms about the marked center, and the heavier side is lower. Illustration not at actual size.