



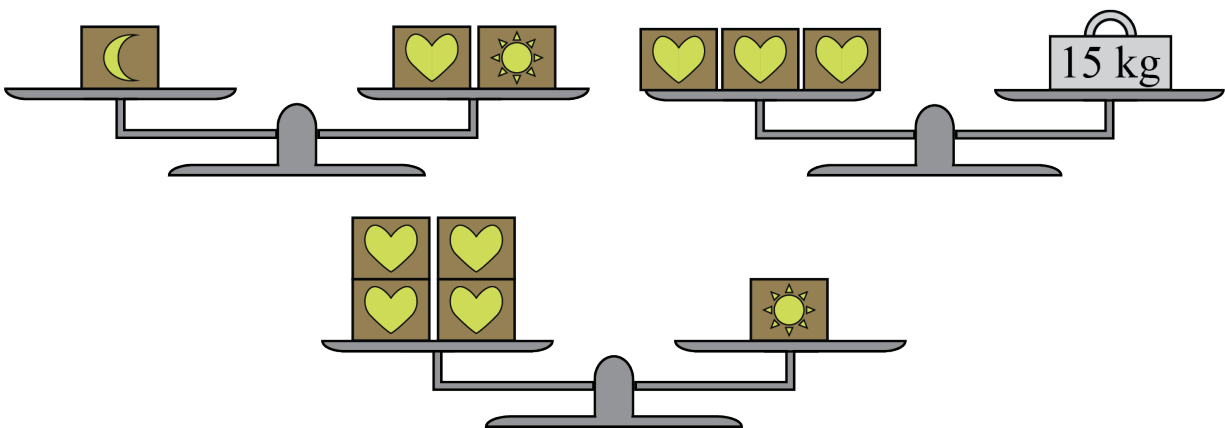
Problem of the Week

Problem A

Balancing Act

James is in charge of sending out boxes from a distribution centre. The contents of the boxes are identified by shapes stamped on them: a heart, a moon, or a sun. All boxes with the same stamp have the same mass.

The following diagrams show what James observed when arranging some of the boxes and standard weights on a scale.



Given that each scale is balanced, determine the mass of each box.