

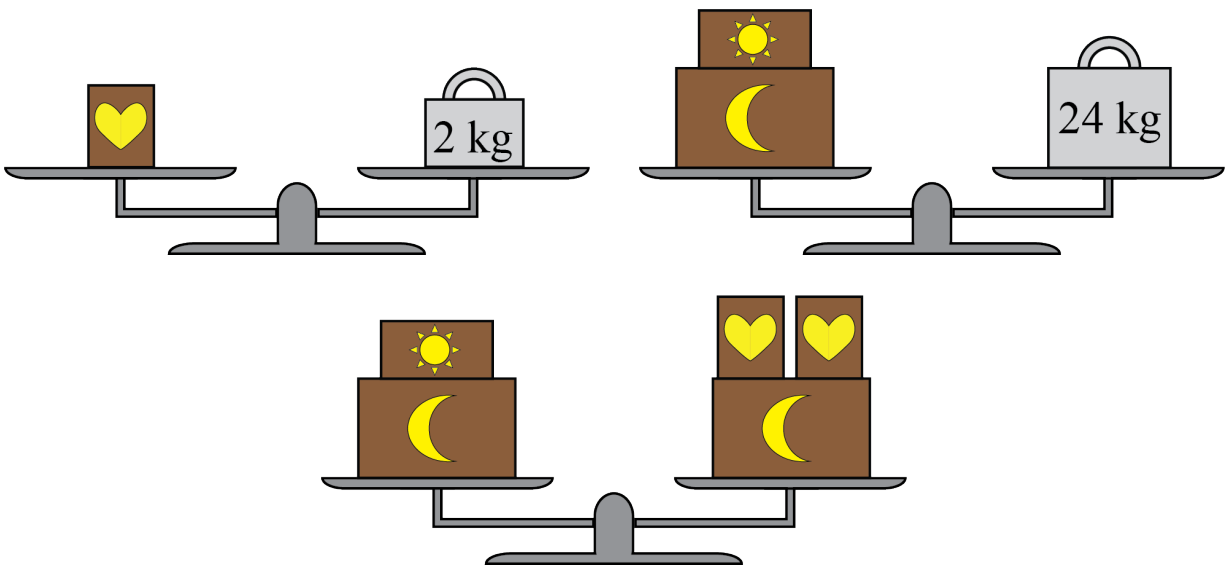


Problem of the Week

Problem A

Balancing Act

Bailey 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, and the cost of sending a box depends on its mass. Bailey has a balance scale and a few standard weights to help with the job. The following diagrams show what Bailey observed when arranging some of the boxes and standard weights on the scales.



Find the mass of each box.