Draw a Beam Balance Scale: Beam, Pans and Pointer

Original task 1 / independent drawing and calculation

Task 1

Draw a level beam balance with a beam length of 100 mm and suspension points 40 mm from the pivot on each side. Use two chains per pan and a pointer 30 mm long.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Beam Balance Scale: Beam, Pans and Pointer

Original task 2 / independent drawing and calculation

Task 2

Draw the same scale tilted so the left side is lower. Keep the beam length 100 mm and the hooks 40 mm from the pivot. Describe how the pans and pointer change.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Beam Balance Scale: Beam, Pans and Pointer

Original task 3 / independent drawing and calculation

Task 3

Draw a beam balance with a beam length of 140 mm and hooks 60 mm from the pivot. Add a three-mark scale behind the pointer. State the distance from each hook to the nearest beam end.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Beam Balance Scale: Beam, Pans and Pointer

Original task 4 / independent drawing and calculation

Task 4

Draw a beam balance with a beam length of 80 mm and hooks 30 mm from the pivot. Use three chains per pan. Check whether the arms are equal and whether the hooks fit inside the beam ends.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.