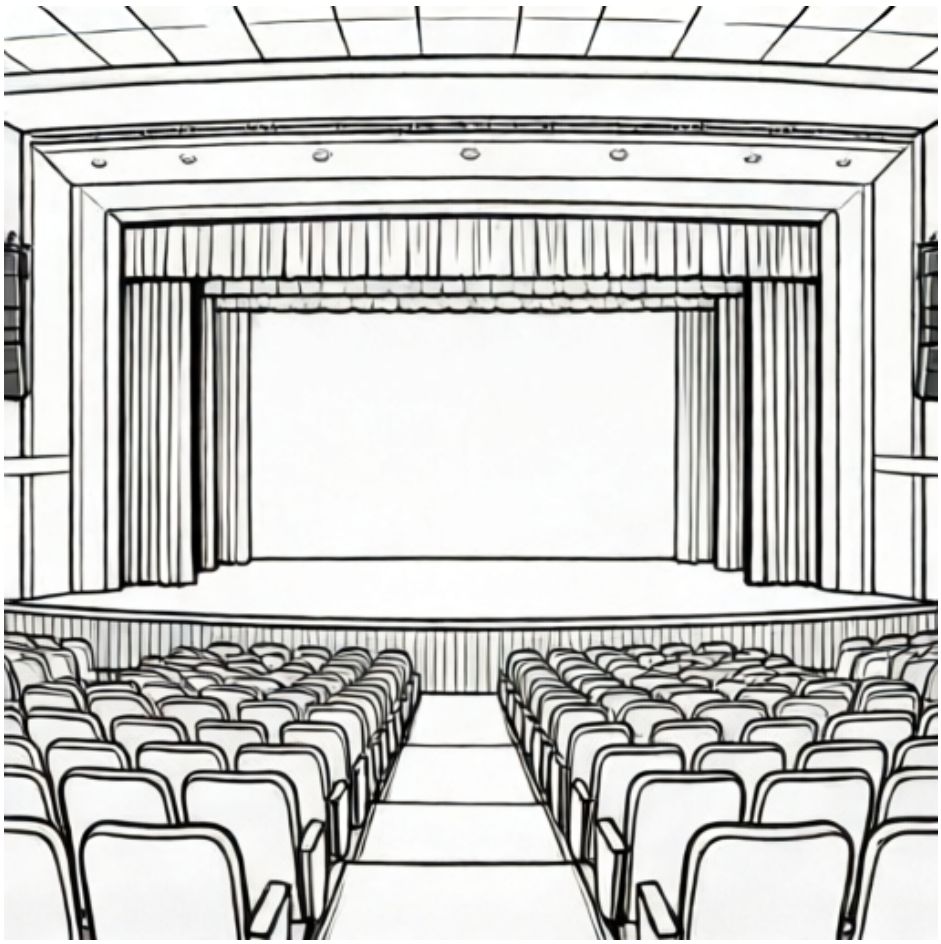
Auditorium Drawing: Stage, Tiered Seating, and Sightlines

Topic reference / ordinary illustration



Ordinary topic reference. Hypothetical dimensions in the four tasks are supplied in their own text; this illustration is not their measured answer.

Auditorium Drawing: Stage, Tiered Seating, and Sightlines

Worked example / complete source key

Using hypothetical values: stage lip height 1.0 unit, row 1 platform 0 units, riser 0.5 units, seated eye height 1.2 units, top-of-head height 1.3 units. Check whether row 3 can see the stage lip over row 2. Assume the horizontal distance from row 3 to the stage lip is 3 row spacings and row 2 is 1 row spacing from row 3, so row 2 lies one-third of the way from row 3 to the stage lip.

Answer: Row 2 platform is 0.5 units; row 3 platform is 1.0 unit. Row 3 eye is 1.0 + 1.2 = 2.2 units. Row 2 top of head is 0.5 + 1.3 = 1.8 units. The sightline from 2.2 at row 3 to 1.0 at the stage lip drops 1.2 units over 3 spacings, or 0.4 units per spacing. At row 2, one spacing from row 3, the sightline height is 2.2 − 0.4 = 1.8 units. This equals the top-of-head height, so the line just grazes row 2's head; it does not clearly clear it. Raise the row 3 platform slightly or the stage lip to gain clearance.