Portrait Drawing: Place Features with Proportion Guides

Original tasks 1, 2 / complete keys

Task 1

A head box is 80 mm tall. Using the convention, calculate the eye line and nose line positions from the top. Then state the nose-to-bottom distance.

Answer: Eye line: 80 divided by 2 = 40 mm from the top. Nose line: three times 80 divided by 4 = 60 mm from the top. Nose-to-bottom distance: 80 minus 60 = 20 mm.

Reason: The eye line is half of H. The nose line is three-quarters of H. Subtract the nose line position from H to find the remaining distance to the bottom.

Check: Add the eye line position and the eye-to-bottom distance: 40 mm plus 40 mm equals 80 mm, which matches H. Confirm the nose line is between the eye line and the bottom.

Task 2

A head box is 100 mm tall. The nose line is at 75 mm from the top. Calculate the mouth line using one-third of the nose-to-bottom distance. Then check that the mouth line is below the nose line and above the bottom.

Answer: Nose-to-bottom distance: 100 minus 75 = 25 mm. One-third of 25 mm is about 8.33 mm. Mouth line: 75 plus 8.33 = 83.33 mm from the top. The mouth line is below 75 mm and above 100 mm.

Reason: Find the remaining distance from the nose line to the bottom, take one-third of it, and add that to the nose line position.

Check: Confirm 75 is less than 83.33 and 83.33 is less than 100. Recalculate one-third of 25 mm and compare with the recorded mouth line value.

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Original tasks 3, 4 / complete keys

Task 3

A head box is 90 mm tall. The eye line is at 45 mm. A student marks the nose line at 70 mm and the mouth line at 60 mm. Identify the vertical order error and give a corrected mouth line position using one-third of the nose-to-bottom distance.

Answer: The mouth line at 60 mm is above the nose line at 70 mm, so the vertical order is wrong. Corrected nose-to-bottom distance: 90 minus 70 = 20 mm. One-third of 20 mm is about 6.67 mm. Corrected mouth line: 70 plus 6.67 = 76.67 mm from the top.

Reason: The mouth line must be below the nose line. Recalculate the mouth line from the nose line position and the remaining distance to the bottom.

Check: Confirm the corrected order: 45 mm eye, 70 mm nose, 76.67 mm mouth, 90 mm bottom. Check that 70 is less than 76.67 and 76.67 is less than 90.

Task 4

A head box is 140 mm tall and 100 mm wide. The eye line is at 70 mm. On the eye line, two eye positions are marked with a 20 mm gap between them, and each eye width is 15 mm. Calculate the total horizontal space used by the two eyes and the gap. Then state whether this fits within the 100 mm head width.

Answer: Total horizontal space: 15 mm plus 20 mm plus 15 mm = 50 mm. This fits within the 100 mm head width, leaving 50 mm for the remaining side spaces.

Reason: Add the two eye widths and the gap. Compare the sum with the head width using the same unit.

Check: Subtract the total used space from the head width: 100 minus 50 = 50 mm. Confirm the result is not negative and that the eye line position plus the eye-to-bottom distance equals 140 mm.

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Source rubric / reflection

- [ ] The head box height H is measured and recorded in one consistent unit.
- [ ] A vertical midline is present and used as a placement aid.
- [ ] The eye line, nose line, and mouth line are marked as fractions of H and labeled.
- [ ] The vertical order is top, eye line, nose line, mouth line, bottom.
- [ ] The sum of top-to-eye and eye-to-bottom distances equals H within the recorded measurement.
- [ ] Feature widths and gaps are measured with the same unit and recorded.
- [ ] Valid style alternatives are accepted when the recorded measurements and checks remain consistent.

Reflection: What did you check, what did you change, and what will you try next?