Draw an Aircraft Planform: Wing Sweep, Fuselage Axis, and Tail Layout

Original task 1 / independent drawing and calculation

Task 1

A grid shows a fuselage centerline. The wing root is at station 3 and the tip at station 6. The tip is 4 squares above the centerline. Draw the lateral reference at station 3 and calculate the sweep angle to the leading edge. State the reference.

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.

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Original task 2 / independent drawing and calculation

Task 2

A planform has a tail station at 9 and a tail trailing edge at station 11 along the centerline. The tail half-span is 2.5 squares each side. State the tail span and tail chord in grid squares.

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.

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Original task 3 / independent drawing and calculation

Task 3

A learner measures sweep as 40 degrees from the fuselage centerline. Explain the error and give the corrected reference line to use.

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.

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Original task 4 / independent drawing and calculation

Task 4

On a grid, place the wing root at station 2 and the tip at station 5. The tip is 3 squares above the centerline. Draw the lateral reference and calculate the sweep angle to the leading edge. Then place a tail at station 8 with half-span 2 squares and chord 1.5 squares. List the labels you would include.

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.