Draw a Bicycle: Frame Geometry, Wheels, and Handlebar

Original task 1 / independent drawing and calculation

Task 1

On a ground line, mark two wheel centers 80 mm apart (hypothetical example). Draw two equal circles with radius 25 mm each. State the wheelbase and verify equal radii.

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

Place a bottom bracket 15 mm above the ground line between two wheel centers. Draw a chainstay to the rear wheel center and a seat tube upward. Describe how you check that the rear triangle can close.

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

Draw a main triangle using a head tube, top tube, down tube, and seat tube. Label the bottom bracket and head tube. Explain one way to verify the triangle is closed.

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

Add a handlebar assembly to a head tube: stem upward, bar forward, two grips. Then add a saddle above the seat tube and a crank circle with pedal line at the bottom bracket. List three checks for this detail set.

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.