Cross-Contour Lines on a Side-Lying Bottle

Original task 1 / independent drawing and calculation

Task 1

A bottle lies on its side with its axis tilted 15 degrees above horizontal. The body is 10 cm long and 3 cm wide. Place three cross-contour lines evenly along the body. Describe where they go and how they tilt.

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 bottle lies on its side with its axis tilted 40 degrees above horizontal. The body is 8 cm long and 2 cm wide. Draw four wrap lines. Explain how their direction differs from a 20-degree version of the same bottle.

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 bottle lies on its side with its axis tilted 25 degrees. The body is 9 cm long and 3 cm wide. You draw five wrap lines but one stops halfway across the body. Identify the mistake and state the fix.

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

A bottle lies on its side with its axis tilted 30 degrees. The body is 12 cm long and 4 cm wide. You place wrap lines at 1 cm, 3 cm, 5 cm, 7 cm, 9 cm, and 11 cm along the axis. Are the lines evenly spaced? If not, state a corrected spacing for six lines.

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.