

Cylinder Nets and Surface Area

Name: _____ Date: _____

Show your calculations, diagrams and explanations. Start with questions 1–2, then build toward the final challenge.

Public practice with published answers. This is not a full-topic readiness assessment.

1. A closed cylinder has radius 3 cm and height 5 cm. Draw its net and label the rectangle dimensions and the two circles. No area calculation is required.

Show your work:

2. A paper label covers only the curved side of a cylinder with radius 4 cm and height 9 cm. Find the label area exactly and using $\pi \approx 3.14$.

Show your work:

3. A closed cylinder has diameter 10 cm and height 12 cm. Find total surface area exactly and using 3.14.

Show your work:

4. A cylindrical container is open at the top and has radius 6 cm and height 8 cm. Sketch a net showing only its surfaces and find their total area in terms of π .

Show your work:

5. The rectangle in a closed cylinder net is 18π cm long and 7 cm wide. Find the cylinder radius and total surface area in terms of π .

Show your work:

6. A cardboard sleeve covers the curved side of a cylinder of radius 5 cm and height 11 cm. It needs a 2 cm overlap along the wrapping direction, with no overlap added to the height. Find the rectangular cardboard area using $\pi \approx 3.14$.

Show your work: