

$$SA_{cyl} = 2\pi r h + 2\pi r^2$$

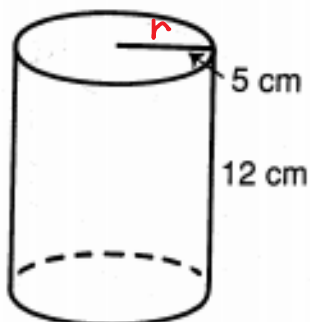
tube + top & bottom

Why Did Humpty Dumpty Have a Great Fall?

Do each exercise and find your answer in the answer column. Write the letter of the answer in each box containing the number of the exercise. Use 3.14 for π . ←

3	8	13	11	6	4	2	9	5	8	10	11	12	11	1	7	2	13	13	4	10
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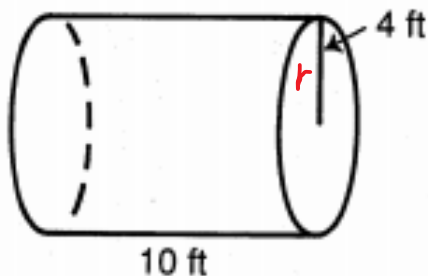
Find the lateral area and the total surface area of each cylinder.



① lateral area: _____

② total area: _____

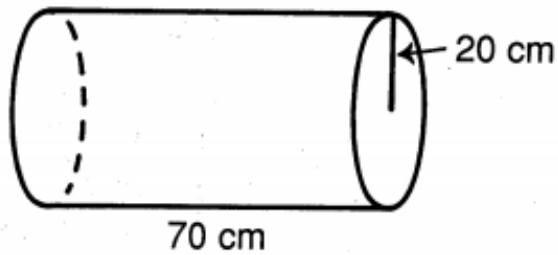
*'lateral' means side.
The tube part.*



③ lateral area: _____

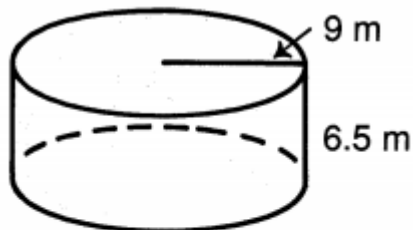
④ total area: _____

- Ⓐ 412.18 ft²
- Ⓑ 803.84 in.²
- Ⓒ 792.16 m²
- Ⓓ 251.2 ft²
- Ⓔ 904.32 ft²
- Ⓕ 861.6 cm²
- Ⓖ 367.38 m²
- Ⓗ 376.8 cm²
- Ⓘ 244.92 cm²
- Ⓚ 815.18 ft²
- Ⓛ 11,304 cm²
- Ⓜ 942 cm²
- Ⓝ 351.68 ft²
- Ⓞ 775.14 in.²
- Ⓟ 533.8 cm²
- Ⓛ 271.296 m²
- Ⓞ 876.06 m²
- Ⓟ 12,412 cm²
- Ⓛ 8,792 cm²
- Ⓛ 311.046 m²



⑤ lateral area: _____

⑥ total area: _____



⑦ lateral area: _____

⑧ total area: _____

II. Find the total surface area of each cylinder.

⑨ $r = 3$ cm
 $h = 10$ cm

⑩ $r = 8$ in.
 $h = 8$ in.

⑪ $d = 10.8$ m
 $h = 2.6$ m

III. Solve.

⑫ A can of tomato juice is a cylinder with a radius of 7.5 cm and a height of 20 cm. What is the area of the label around the can?

⑬ A steel oil tank is a cylinder with a diameter of 12 ft and a height of 18 ft. How many square feet of steel were needed to make the tank?