

Salutation to your solution!

- Sudhakar Attili.

1. There are some equations given as shown in Figure A. What are these equations related to?

$12 + 8 = 8$
$8 + 8 = 4$
$7 + 7 = 2$
$11 + 8 = 7$

Figure A

2. There is a Cylinder as shown in Figure B below. The Length of the Cylinder is 12 meters and circumference is 4 meters. A rope is wound around it which takes 4 complete



Figure B

turns. Can you find the length of the rope?

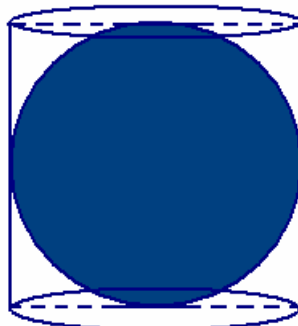


Figure C

3. A sphere fits exactly inside a thin-walled cylinder. The Diameter and Height of the cylinder are same and is equal to the diameter of the sphere as shown in figure C. Can you tell which surface area is more? Sphere's surface area? Cylinders lateral surface area?

Hint: Sphere's surface area is $4\pi r^2$.
Perimeter of Circle is $2\pi r$.

4. A Cylinder and a Cone are having same diameter. Their volumes are also same. What is the ratio of their heights?

5. A cow is tied with a rope of 7m in a corner of a rectangular grass land 12m x 7m. Can you tell the area in square meters that it can reach? $\pi = 22/7$.

You can send your answers either by post or by e-mail to the below address on or before March 15th.

Mailing Address:

Editor, Sanghamitra,
12450 Lyric Ct.
Saint Louis,
MO 63146.

e-mail : susri@sanghamitra.org