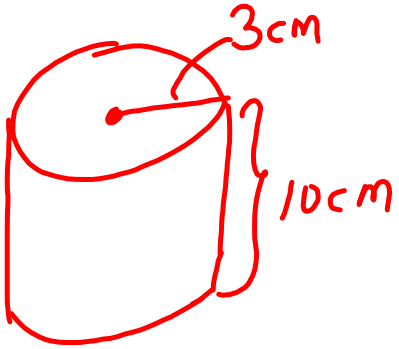
November 22, 2016

The diameter of a cylinder is 6 cm and the height is 10 cm. Find the surface area of the cylinder...include a sketch

$(3)^2 = 9$

2 circles πr^2 = area circle



$SA = 2\pi r^2 + 2\pi rh$

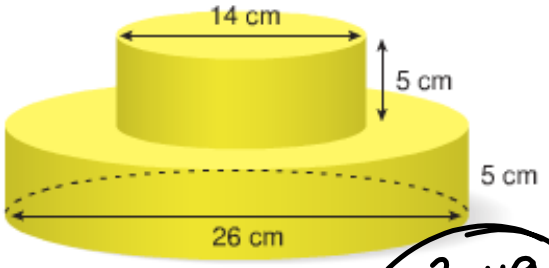
$= 2(3.14)(3)^2 + 2(3.14)(3)(10)$

$= 56.52 + 188.4$

$= 244.92\ cm^2$

area of two circles

Two round cakes have diameters of 14 cm and 26 cm, and are 5 cm tall.
They are arranged as shown. The cakes are covered in frosting. What is the area of frosting?



$7^2 = 49$

* No frosting between layers

* No frosting on bottom of cake.

$13^2 = 169$

SA top

$SA: 2\pi r^2 + 2\pi rh$

$= 2(3.14)(7)^2 + 2(3.14)(7)(5)$

$= 307.72 + 219.80$

$= 527.52$

two circles

SA bottom

$SA = 2\pi r^2 + 2\pi rh$

$= 2(3.14)(13)^2 + 2(3.14)(13)(5)$

$= 1061.32 + 408.2$

$= 1469.52$

$+ \quad = 1997.04$ Total SA

-530.66

-307.72

$1158.66\ cm^2$

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3 a, b, c

a) 121 cm^2

b) 117 cm^2

c) 283 cm^2

#4 a, b

58.1 cm^2

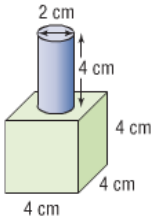
62.1 cm^2

#9 Hints...the base of the cake will not be frosted...it sits on the plate...DO NOT put frosting between layers

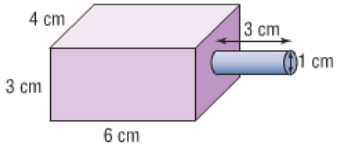
2068.71 cm^2

composite object. Give the answers to the nearest whole number.

a) cylinder on a cube



b) cylinder on a rectangular prism



c) cylinder on a cylinder