10-2 Three Dimensional Figures

Name: _____   Time› Start: _____   Finish: _____   Total Time = _____
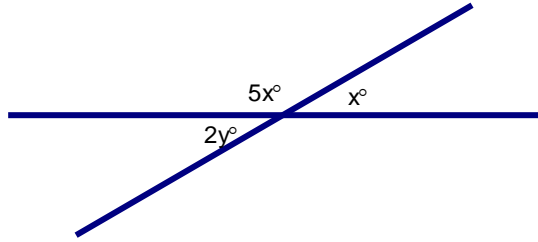
_____ 1. What is the total surface area of a cylinder with a
radius of 3 inches and a height of 6 inches?

_____ 2. What is the total surface area of a cylinder with a
radius of 8 inches and a height that is equal to its diameter?

_____ 3. What is the volume of a sphere that has a radius of 6 cm?

_____ 4. What is the surface area of a sphere that has a diameter of 10 cm?

_____ 5. What is the volume of a cylinder that has a diameter of 6 cm and a
height four times its radius?

_____ 6. What is the volume of a pyramid that has a height of 6 cm and
a square base with each side being 8 cm in length?

_____ 7. Box A is 10 cm by 8 cm by 5 cm. Box B is 5 cm by 4 cm by 2 cm.
If box B is put into box A, how much room (volume) is left in box A?

_____ 8. How much volume is left in a 5 cm cube if a
4 cm cube is placed inside the 5 cm cube?

_____ 9. How much volume is left inside a 6 cm sphere
if a 4 cm sphere is placed inside the 6 cm sphere?

_____ 10. How much larger (square inches) is a 14 inch pizza than a 12 inch pizza?

_____ 11. The radius of Sphere A is 2 inches, and the radius of Sphere B is 4 inches.
How many times larger is the volume of Sphere B compared to the volume
of Sphere A?

SAT Questions – All have videos

_____Trig 2-2   12. In the figure below, what is the value of y?

_____Trig 3-1   16. If $f(x) = (x - 2)^2 + 4$, what is the least possible value of $f(x)$?
A. 0
B. 1
C. 2
D. 3
E. 4

_____Trig 3-1   19. If $f(x) = \sqrt{x+1}$ for all values of $x \geq 0$, and $f(x) = x^2 + 2$ for all values of x < 0, what is the sum of f(-3) and f(8)?