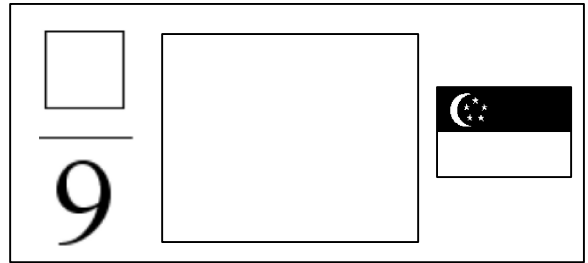




Welcome to
Singapore



G.13 & G.14 3-D Solids



1. A glass is in the shape of a cylinder with a height of 8 inches and a radius of 2.5 inches. About how many cubic inches of water does the glass hold?

- A. 172 m^3
- B. 157 m^3
- C. 164.85 m^3
- D. 148.24 m^3

2. A standard NBA basketball has a diameter of 9.5 inches. Approximately how much material is required to cover the standard NBA basketball?

- A. 448.9 in^2
- B. 283.5 in^2
- C. 3591.36 in^2
- D. 1134.1 in^2

3. If the radius of a circle is tripled, then the area of the circle is multiplied by:

- A 27
- B 9
- C 3
- D 6

4. The ratio between the volumes of two spheres is 27 to 8. What is the ratio between their respective radii?

- A 81:64
- C 9:8
- B 27:16
- D 3:2

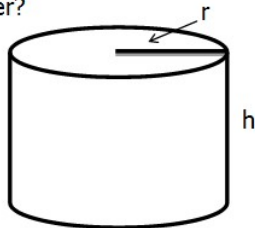
5. Two similar cones have heights 5 and 20. What is the ratio of their areas?

- A. 1:16
- B. 1:64
- C. 1:4
- D. 1:8

6. A cylindrical container has a height of 12 inches and a diameter of 8 inches. How much water can this container hold?

- A. 603.2 in^3
- B. 2412.7 in^3
- C. 402.1 in^3
- D. 1005.3 in^3

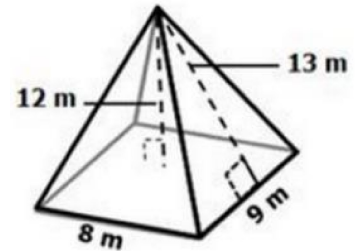
7. If the radius of the cylinder is tripled, what will be the resulting effect on the volume of the cylinder?



- A. 3 times as much
- B. 6 times as much
- C. 8 times as much
- D. 9 times as much

8. What is the lateral area of the rectangular pyramid shown?

- A. 221 m^2
- B. 293 m^2
- C. 110.5 m^2
- D. 204 m^2



9. Iced tea is dispensed into cans from this container made up of a cylinder and a cone. How much iced tea can this container hold?

- A. 150.86 ft^3
- B. 75.43 ft^3
- C. 7241.14 ft^3
- D. 904.32 ft^3

