

Name: _____

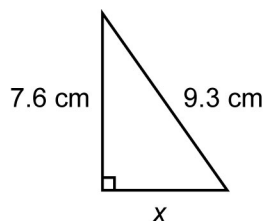
Date: _____

Chapter 8 Practice Test

Multiple Choice

For questions 1 to 5, select the best answer.

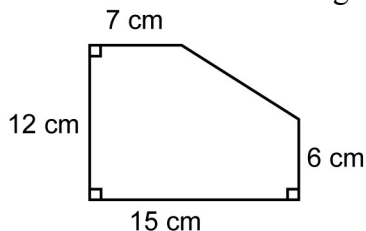
1. What is the length of x to the nearest tenth of a centimetre?



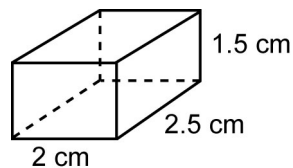
- A 12.0 cm B 1.7 cm
 C 5.4 cm D 2.9 cm
2. A cone has diameter 6 cm and height 4 cm. Which is the volume of the cone to the nearest tenth of a cubic centimetre?

- A 37.7 cm³ B 150.8 cm³
 C 100.5 cm³ D 113.1 cm³

3. What is the area of this figure?



- A 204 cm²
 B 132 cm²
 C 180 cm²
 D 156 cm²
4. What is the surface area of this rectangular prism?



- A 7.5 cm²
 B 23.5 cm²
 C 22.5 cm²
 D 17.5 cm²

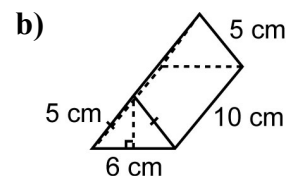
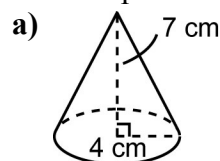
5. What is the surface area, to the nearest tenth of a square centimetre, of a sphere with radius 5 cm?

- A 523.6 cm²
 B 314.2 cm²
 C 62.8 cm²
 D 1570.8 cm²

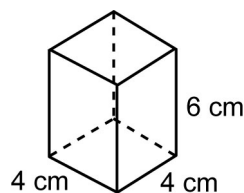
Short Response

Show all steps to your solution.

6. Find the surface area and volume of each object. Round your answers to one decimal place.



7. A cone just fits inside this box.

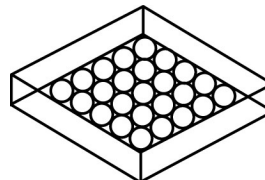


What is the volume of the cone?

Extend

Provide complete solutions.

8. Twenty-five balls, each with diameter 9 cm, are packed in a single layer in a square box.



- a) What is the minimum volume of the box?
 b) What is the surface area of the box?
 c) How much empty space is in the box?