Date: _____

Chapter 5 Test

For #1 to #5, choose the best answer.

- **1.** What is the name of the following shape?
 - A cube
 - **B** cylinder
 - ${\boldsymbol C}$ rectangular prism
 - **D** triangular prism



BLM 5-16

- 2. The diameter and height of a cylinder are each 2 cm. What is the surface area of the cylinder to the nearest hundredth of a square centimetre?
 A 15.70 cm²
 B 18.84 cm²
 C 31.40 cm²
 D 37.68 cm²
- **3.** What 3-D object has a net like this one?
 - A cube
 - **B** cylinder
 - **C** rectangular prism
 - **D** triangular prism
- **4.** What is the surface area of this box?
 - **A** 208 mm²
 - **B** 296 mm²
 - **C** 416 mm²
 - **D** 832 mm²





5. What is the length of one side of a cube whose surface area is 600 cm²?
A 10 cm
B 15 cm
C 20 cm
D 60 cm

Short Answer

6. An object may have more than one net. Draw two different nets for this triangular prism.



- **7.** Calculate the surface area of the rectangular prism to the nearest tenth of a square centimetre.
- **8.** Calculate the surface area of the cylinder to the nearest tenth of a square centimetre.

Extended Response

- **9.** You are designing a covered container in the shape of a rectangular prism for 24 hockey pucks. Each puck has a diameter of 7.6 cm and a height of 2.5 cm.
 - a) Design two different containers and calculate the surface area of each one.
 - **b)** Which container would you choose to build? Justify your choice.
- 10. Jon wants to remodel his bedroom. It has a length of 4.2 m, a width of 3.7 m, and a height of 2.5 m. How much will it cost to paint the ceiling and walls, as well as carpet the floor?
 - The paint he chooses costs \$17 per litre. One litre covers 20 m².
 - The carpet he chooses costs \$34 per m².





