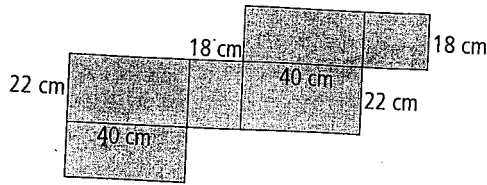
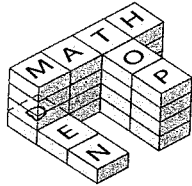


9. Answer may vary. Example:

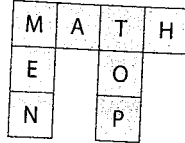


10. a) and b) Both nets form the same triangular prism.

11. a) Answers may vary. Example:

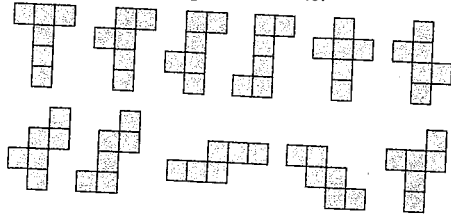


b) Answers may vary. Example:



12. a) yellow b) green c) brown

13. There are 11 possible nets:



5.3 Surface Area of a Prism, pages 180–181

3. 819.5 cm^2

4. 397.0 cm^2

5. 7.7 m^2

6. 106.7 cm^2

7. 94 mm^2

8. a) 4 b) 6.36 m^2

9. Answers may vary. Example: $115\,700 \text{ mm}^2$ (book cover of length 26 cm, width 21 cm, and thickness 2.5 cm)

10. 9.96 m^2

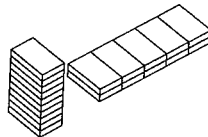
11. 70 m^2

12. The triangular prism would require less wrapping paper because its surface area of 770 cm^2 is less than the surface area of 1000 cm^2 of the rectangular prism.

13. 266 pans

14. a) $9 \text{ cm} \times 13.0 \text{ cm} \times 8.5 \text{ cm}$

b) Yes, these two sets of dimensions are possible: $9 \text{ cm} \times 6.5 \text{ cm} \times 17 \text{ cm}$ and $9 \text{ cm} \times 32.5 \text{ cm} \times 3.4 \text{ cm}$.

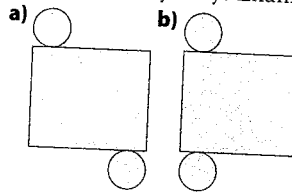


15. a) 1:4 b) The ratio of the old surface area to the new surface area is 1:9. Yes, there is a pattern. The surface area is increased by a factor equal to the square of the multiplier of the edge length.

16. a) one 4-L can and two 1-L cans of wall paint plus one 4-L can of ceiling paint b) Answer may vary. Example: The paint costs \$73.88. At a tax rate of 12% (GST and PST), the total cost would be \$82.75.

5.4 Surface Area of a Cylinder, pages 186–187

3. Answers may vary. Example:



4. a) 736.3 cm^2 b) 2009.6 cm^2

5. a) 135.4 cm^2 b) 0.2 m^2

6. a) 88.31 cm^2 b) 149.15 cm^2

7. Answers may vary. Example: Use a formula. It is quicker, and you are less likely to miss part of the calculation.

8. 5604.9 cm^2

9. The 85-cm long container required more plastic. Its surface area of 3125.87 cm^2 is greater than the surface area of 2758.49 cm^2 of the other container.

10. 345.4 cm^2

11. 538.51 cm^2

12. 3228.31 mm^2

13. a) length: 251.2 cm; width: 21 cm b) 5275.2 cm^2

Chapter Review, pages 188–189

1. net

2. surface area

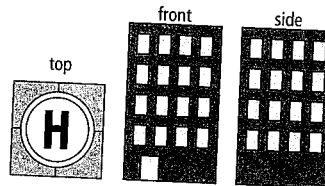
3. right prism

4. cylinder

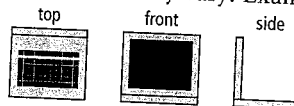
5. triangular prism

6. rectangular prism

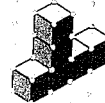
7. a) Answers may vary. Example:



b) Answers may vary. Example:



8. a) Answers may vary. Example:



b) Answers may vary. Example:



9. a) The new front view will be the same as the original side view. The new side view will be the same as the original front view. The new top view will be a 90° turn of the original top view.

