5 Chapter Review

Key Words
Unscramble the letters for each puzzle. Use the clues to help you.

Puzzle	Clues	Solution
1. E T N	a flat diagram you can fold to make a 3-D object	_____
2. U S F A R E C E R A A	the sum of the areas of the faces of an object (2 words)	_____ _____
3. I R H T G R P M I S	a prism with sides perpendicular to its bases (2 words)	_____ _____
4. E C N I Y D R L	a 3-D object with 2 parallel circular bases	_____
5. I R A G N R U A L T S I M R P	a 3-D object with 2 parallel triangular bases (2 words)	_____ _____
6. L E U C A A N R G T R I R M S P	a 3-D object with 2 parallel rectangular bases (2 words)	_____ _____

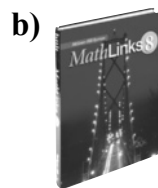## 5.1 Views of Three-Dimensional Objects, pages 230–237

7. Draw and label the top, front, and side views for these objects.

a)
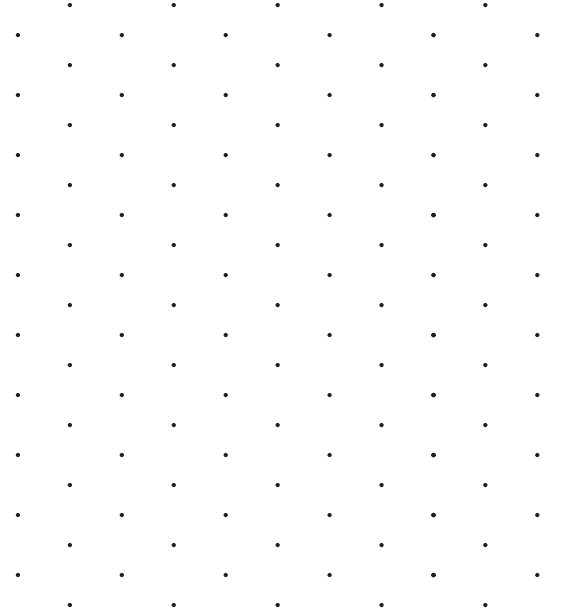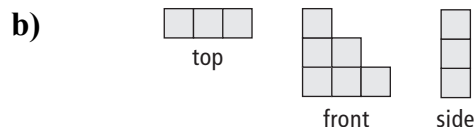
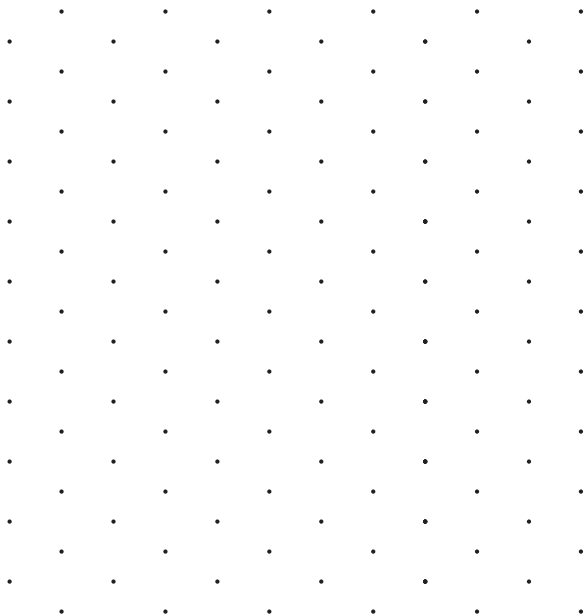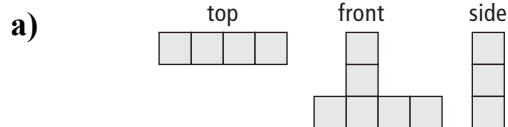top   front   side

b)
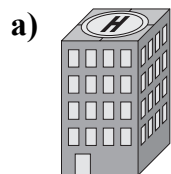
top   front   side

8. Draw each 3-D object on the isometric grid.

a)
top   front   side

b)
top

front   side

9. The diagram shows the top, front, and side views of a filing cabinet.
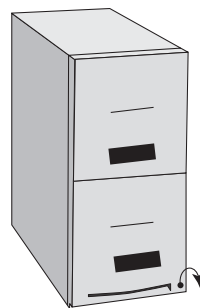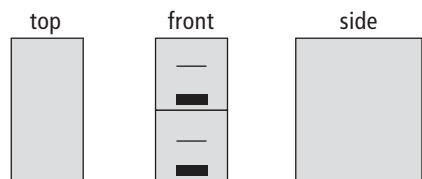
top   front   side
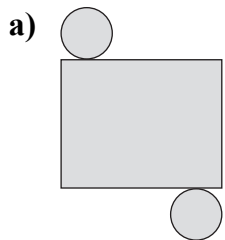
Turn the cabinet 90° clockwise.
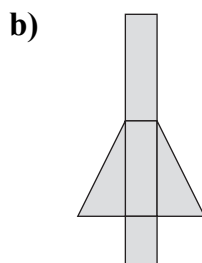Draw the top, front, and side views after the turn.

top   front   side

5.2 Nets of Three-Dimensional Objects, pages 239–244
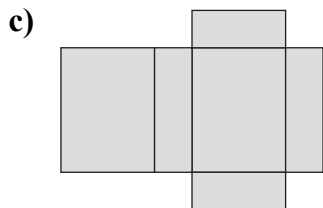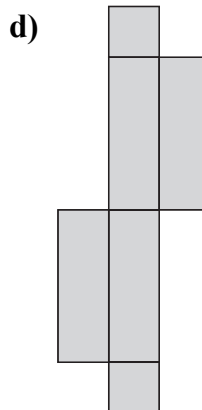
10. Name the object formed by each net.
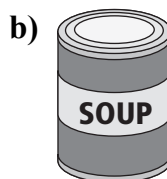
a)

_____

b)

_____

_____

c)

_____

_____

d)

_____

11. Draw the net for each object.

a)

COOKIES

b)

SOUP

Name: _____ Date: _____
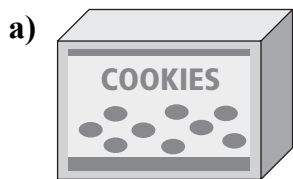
5.3 Surface Area of a Prism, pages 246–254

net of rectangular prism

12. Calculate the surface area of the rectangular prism. Draw and label the dimensions for each view.

top or bottom	front or back	ends

10 mm

27 mm

42 mm
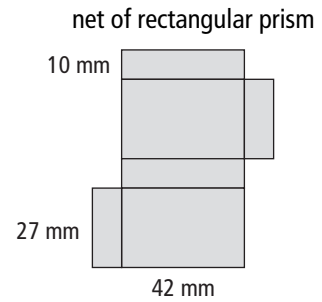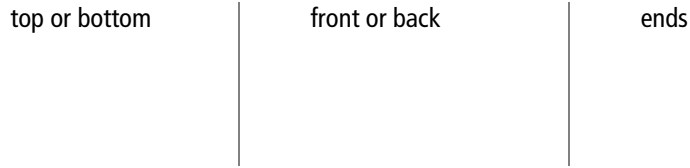
Find the area of each view:

Area of top and bottom	Area of front and back	Area of 2 ends
= 2 × _____	= 2 × _____	= 2 × _____
= _____	= _____	= _____

Surface Area = (area of top and bottom) + (area of front and back) + (area of ends)

= _____ + _____ + _____

= _____

13. Find the surface area of the triangular prism.

8.5 cm

6 cm

2 cm

6 cm

Label the dimensions for each view.

triangle (2)	small rectangle (2)	large rectangle
____ cm	6 cm	8.5 cm
____ cm	____ cm	____ cm
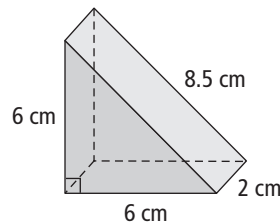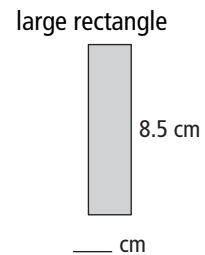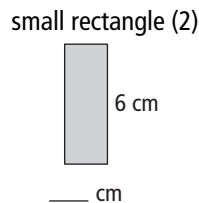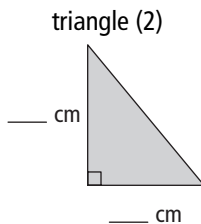
Area of triangle: *Area of small rectangle:*   *Area of large rectangle:*

S.A. = (2 × area of triangle) + (2 × area of small rectangle) + (area of large rectangle)

= (2 × _____) + (2 × _____) + _____

= _____ + _____ + _____

= _____

Name: _____ Date: _____
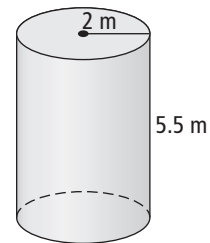
5.4 Surface Area of a Cylinder, pages 256–266

14. Find the surface area of the cylinder.
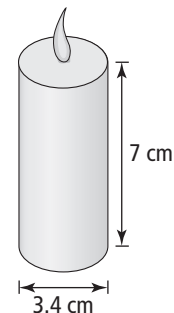
$r =$ _____ $d =$ _____ $h =$ _____

Formula →

Substitute →

Solve →

15. The candle on Kay's table has a diameter of 3.4 cm and is 7 cm tall. Calculate the surface area.

Sentence: _____