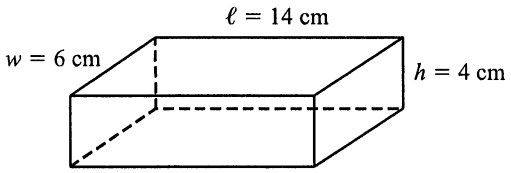
Name _____ Class _____ Date _____

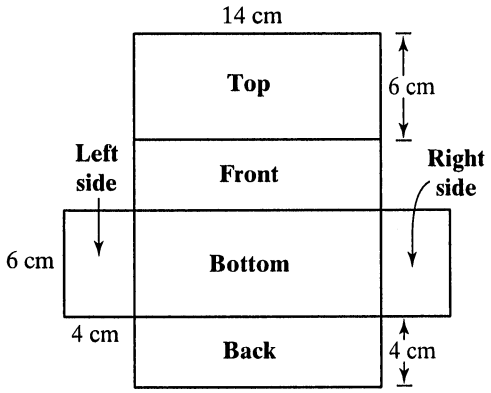
Reteaching 9-8

Surface Areas of Prisms

The *surface area* of a rectangular prism is the sum of the areas of the faces. You can use nets to find surface area.

Find the surface area of the prism.





area of top = area of bottom
area of front = area of back
area of right side = area of left side

① Find the area of the top.
$A = \ell \times w$
$= 14 \times 6$
$= 84 \text{ cm}^2$

② Find the area of the front.
$A = \ell \times h$
$= 14 \times 4$
$= 56 \text{ cm}^2$

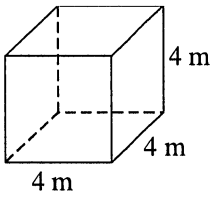
③ Find the area of the right side.
$A = w \times h$
$= 6 \times 4$
$= 24 \text{ cm}^2$

④ Add.
$84 + 84 + 56 + 56 + 24 + 24 = 328$

The surface area of the prism is 328 square centimeters.

Find the surface area of each prism.

1.



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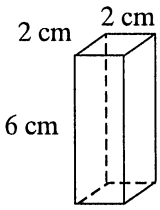
2.



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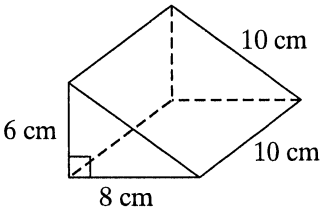
3.



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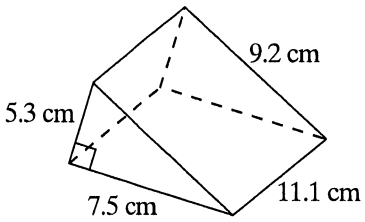
4.



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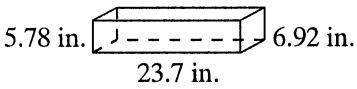
5.



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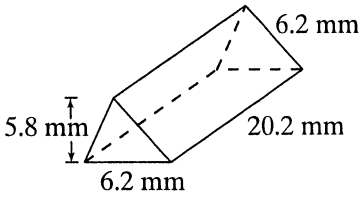

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Name _____ Class _____ Date _____

Reteaching 9-9

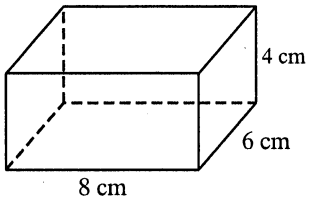
Volumes of Rectangular Prisms

Volume is the number of cubic units needed to fill the space inside a three-dimensional figure. It is measured in cubic units.

Find the volume of the rectangular prism.

Volume = Area of base × height

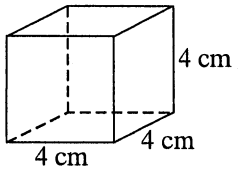
$$\begin{aligned} V &= B \times h \\ &= \ell \times w \times h \\ &= 8 \times 6 \times 4 \\ &= 192 \end{aligned}$$



The volume is 192 cubic centimeters.

Find the volume of each rectangular prism.

1.



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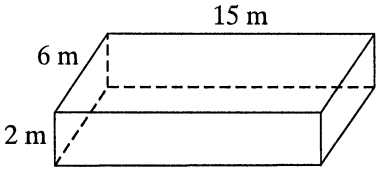
2.



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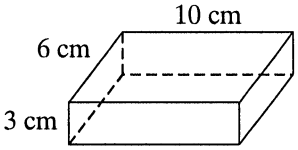

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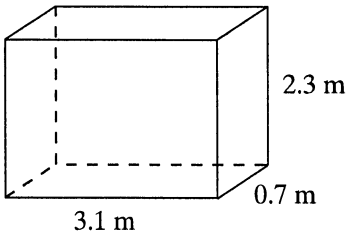
4.



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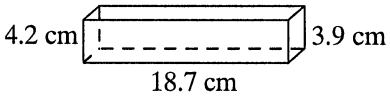
5.



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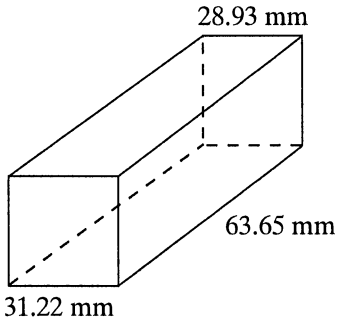

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Find the volume of each rectangular prism with the given dimensions.

7. $\ell = 6$ in., $w = 9$ in., $h = 3$ in.

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8. $\ell = 3.5$ cm, $w = 1.5$ cm, $h = 7$ cm

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9. $\ell = 16$ mm, $w = 18$ mm, $h = 2.5$ mm

_____

10. $\ell = 5$ m, $w = 6.2$ m, $h = 3.9$ m

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