

Name: _____

Unit 5

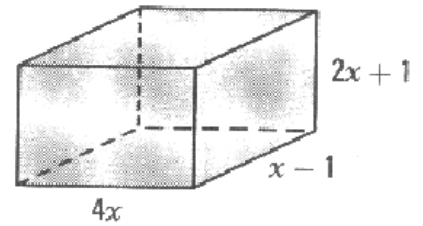
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WS #1 Areas of Prisms and Cylinders

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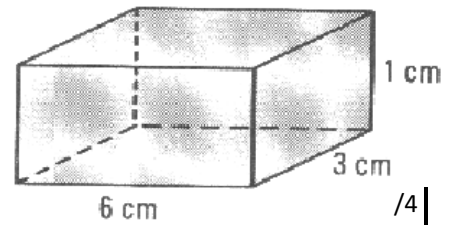
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- 1) The prism on the right has a rectangular base with dimensions $4x$ cm and $(x-1)$ cm. The height of the prism is equal to $(2x+1)$ cm. Find an **algebraic expression for the lateral area** of the prism.



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- 2) Determine the **edge** of a cube that has the same total area as the prism on the right.



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- 3) A cylinder has a radius of 3.5 m and a height of 4 m. Calculate **the lateral area** and **total area** of this cylinder.

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- 4) The circumference of a cylinder's base is equal to 31.40 cm. What is the cylinder's **total area** if its height is equal to 4.5 cm?

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- 5) A garden hose of negligible thickness has a length of 12 m. The diameter of the hose is 3.2 cm. What is, in m^2 , the area of rubber used to make this hose?

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