

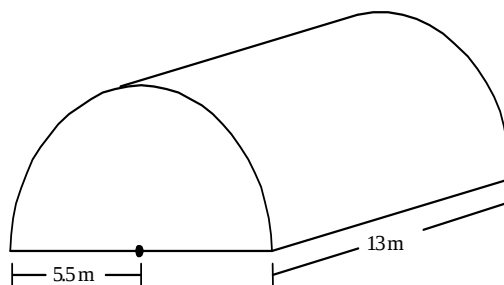
Name: _____

Unit 5

Date: _____

20100**WS #4 Volume of Prism & Cylinder**

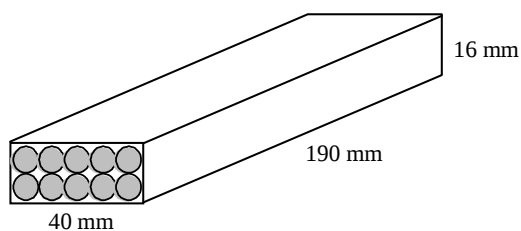
1. Plants and flowers that are used to beautify Montreal's parks are grown in the many greenhouses of the Botanical Gardens. One greenhouse is in the shape of a half-cylinder with radius 5.5 m and height 13 m. If each plant that is grown there requires 0.75 m^3 of air, how many plants can be grown in this greenhouse?

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2. A circular pool has a radius of 3 m and a height of 1.5 m. The pool is filled with water up to $\frac{4}{5}$ of its total capacity. Calculate the number of liters of water in the pool.

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3. A small box contains 10 pencils each of which is in the shape of a cylinder with radius 4 mm and length 190 mm. What is the volume of the empty space in the box, in mm^3 ?

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4. Valerie and Claude just purchased a rectangular-shaped lot measuring 30 m by 50 m. They want to plant a garden so they are going to cover the lot with a layer of topsoil, 10 cm thick. If topsoil costs \$3.75 per cubic meter, what will the total cost be?

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