$\qquad$

## Worksheet 6.1-A- Areas of Prisms and Cylinders

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

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

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.

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 ?
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 $\mathrm{m}^{2}$, the area of rubber used to make this hose?
