

Geometry: 10-4 Notes

VOCAB:

Net: A net is a 2-D representation of a 3-D figure. A net can be folded into a 3-D figure.

Surface Area: The surface area of the TOTAL AREA of all faces and curved surfaces in a 3-D figure.

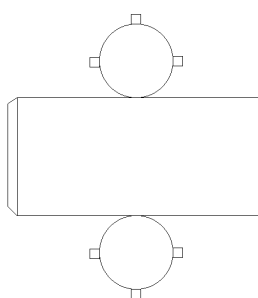
You can think about it this way: Say the 3-D shape was dropped into and fully submerged in a bucket of paint. The amount of paint used to cover it represents the surface area!

Lateral Area (prism): The sum of all faces of a prism EXCEPT for the bases. (the side area of the prism)

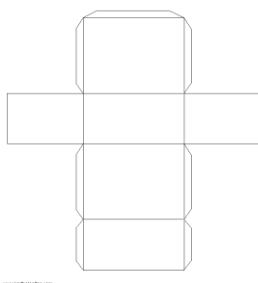
Find the surface area of each 3-D figure. (Imagine the shape, when folded, was dropped into a bucket of paint. Find how much paint, in square units, covers each figure).

- a) How do you think it would be EASIEST to find the surface area from each given net?

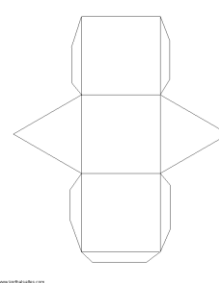
- b) Find all necessary lengths and calculate the surface area:



Rectangular Prism



Triangular prism

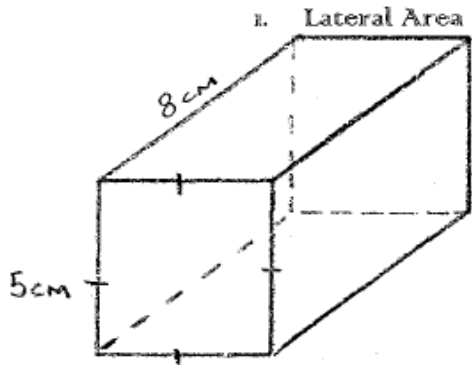


Formula for lateral area of a prism/cylinder:

Formula for surface area of a prism/cylinder:

Examples: Name the solid given. Then, find the lateral area AND surface area of each solid.

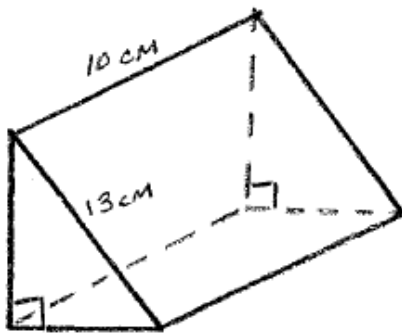
1)



1. Lateral Area = _____

Total Surface Area = _____

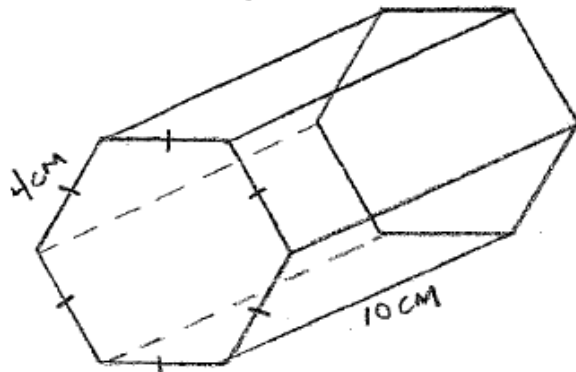
2)



2. Lateral Area = _____

Total Surface Area = _____

3)



5. Lateral Area = _____

Total Surface Area = _____

4)

Lateral Area = _____

Surface Area = _____

