Three Dimensional Shapes

ABOUT FACE

Complete the chart

SOLIDS	NUMBER OF FACES THAT ARE					
	□	△	○	⬠	⬡	▭
Cube	6					
Rectangular Prism	2					4
Triangular Prism		2				3
Pentagonal Prism				2		5
Hexagonal Prism					2	6
Square Pyramid	1	4				
Triangular Pyramid	~~4~~	4				
Pentagonal Pyramid		5		1		
Hexagonal Pyramid		6		~~6~~	1	

EULER'S FORMULA

Complete the chart

SOLID	Number of Faces	Number of Edges	Number of Vertices
Cube	6	12	8
Rectangular Prism	6	12	8
Triangular Prism	5	9	6
Pentagonal Prism	7	15	10
Hexagonal Prism	8	18	12
Square Pyramid	5	8	5
Triangular Pyramid	4	6	4
Pentagonal Pyramid	6	10	6
Hexagonal Pyramid	7	12	7

Explain any relationship(s) that exists between the faces, edges, and vertices of each solid in the chart.

Euler's Formula: faces + vertices = edges + 2

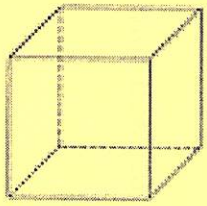
A **net** is a two-dimensional pattern that you can fold to form a three-dimensional figure. A net of a figure shows all the surfaces of that figure in one view.

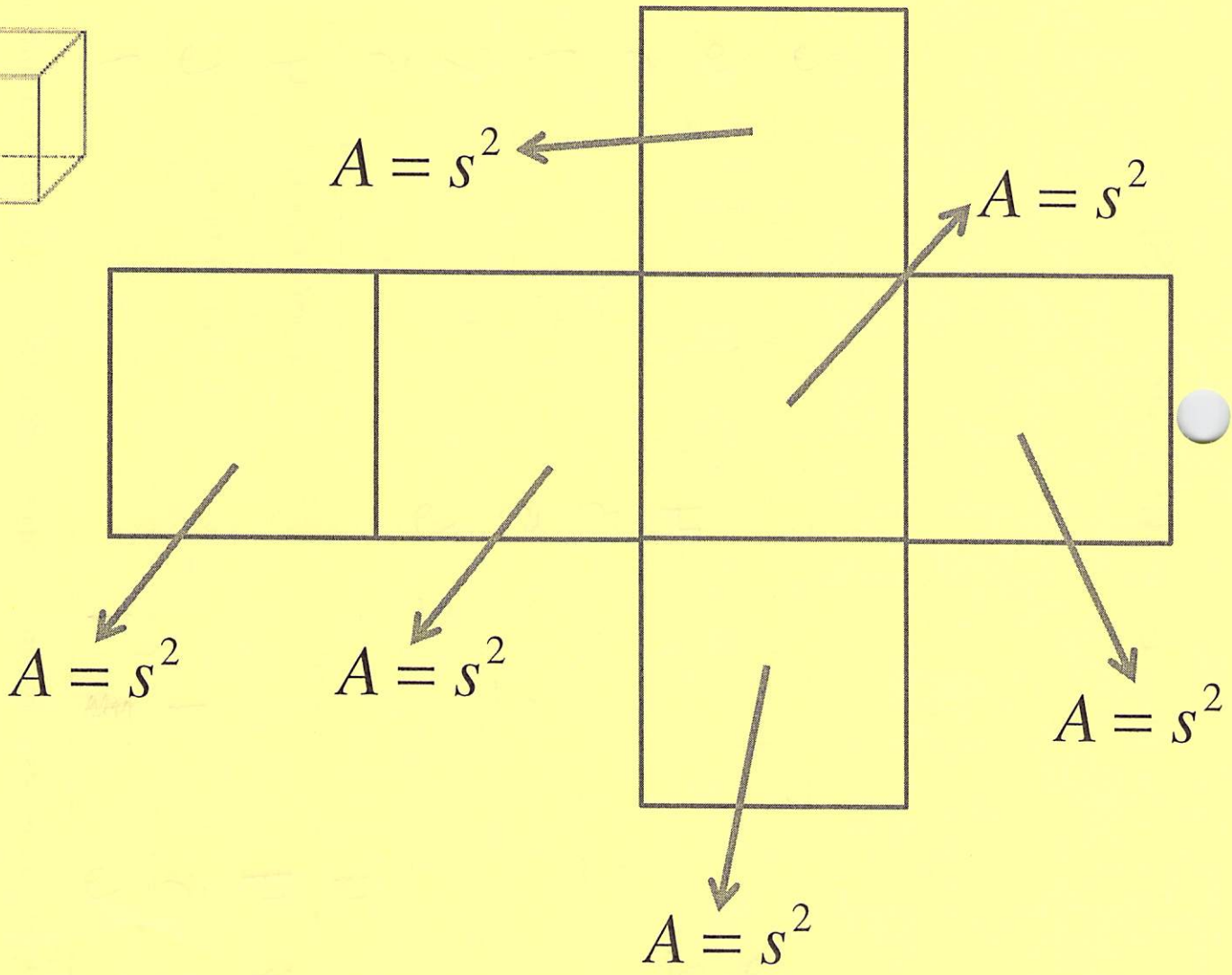
1. Draw the net of each solid as NEATLY AS POSSIBLE. Use the ruler to help you draw straight lines. Your net should look identical to unfolded solid.

2. Draw an arrow and write the area formula for each shape in the solid.

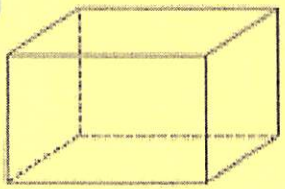
The first solid is done for you:

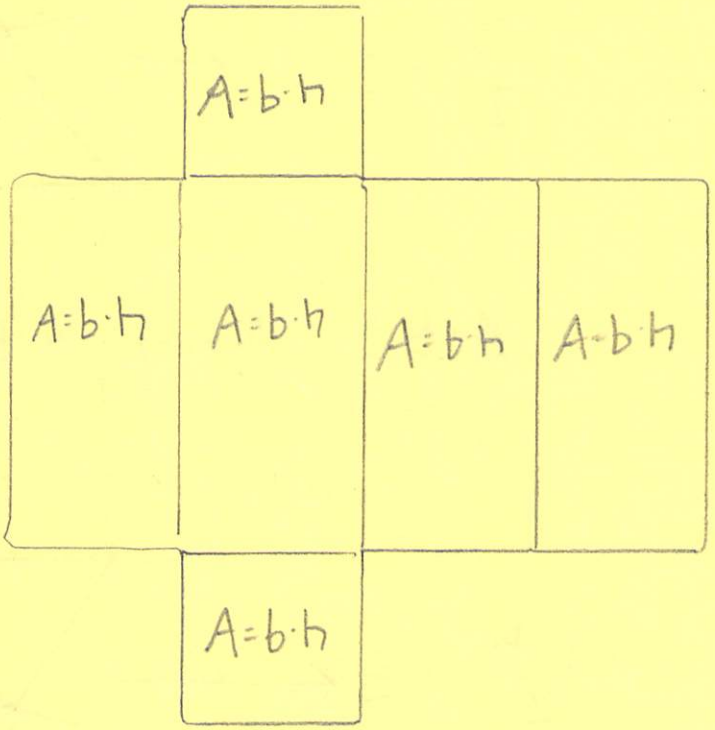
Cube



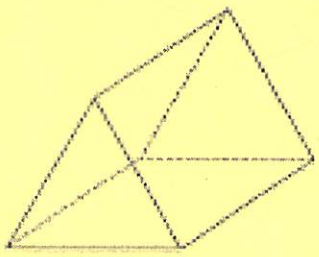


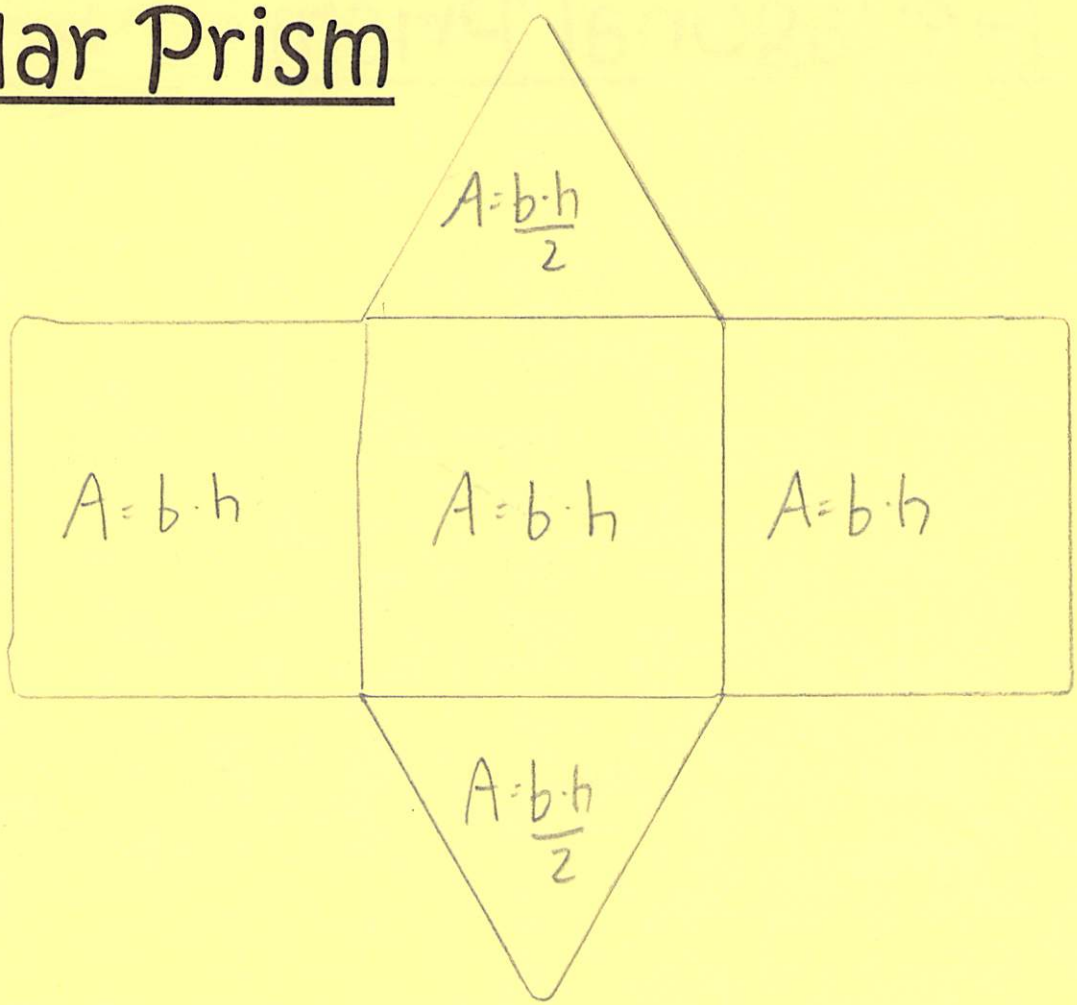
Rectangular Prism



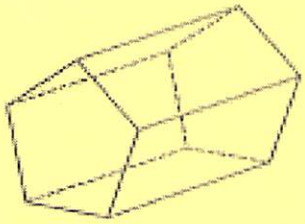


Triangular Prism

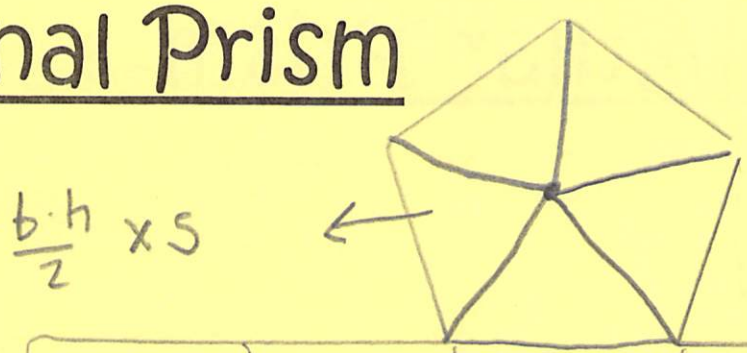


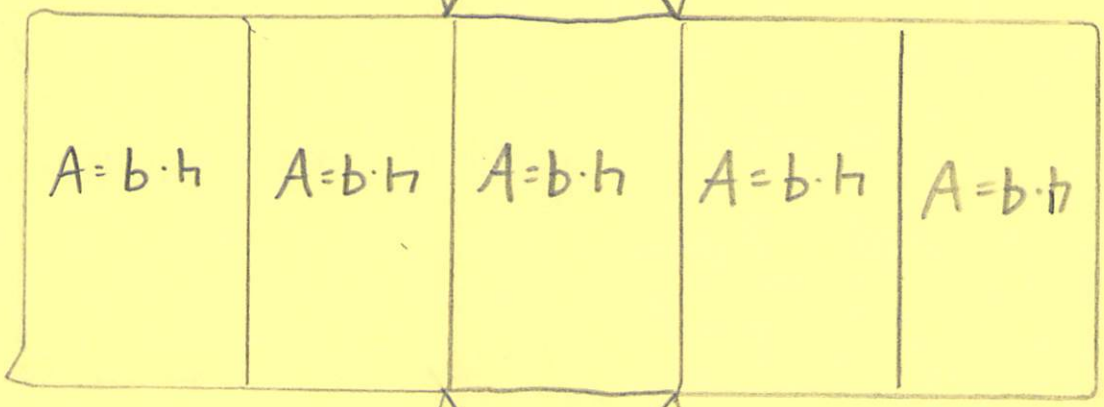


Pentagonal Prism



$A = \frac{b \cdot h}{2} \times 5$





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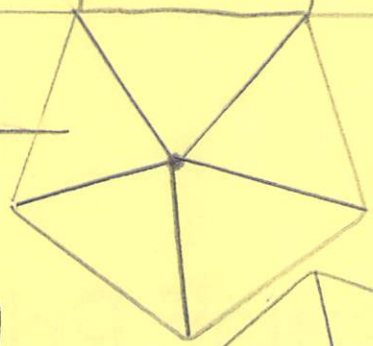
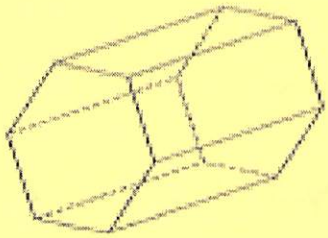
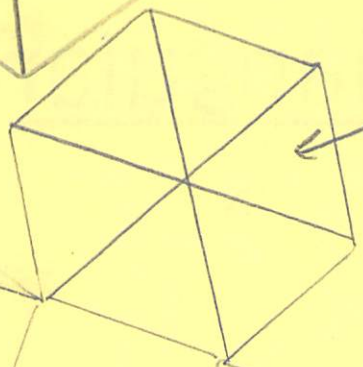


Hexagonal Prism





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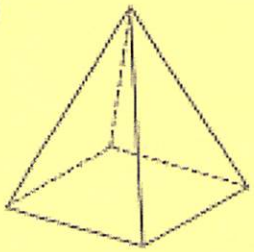
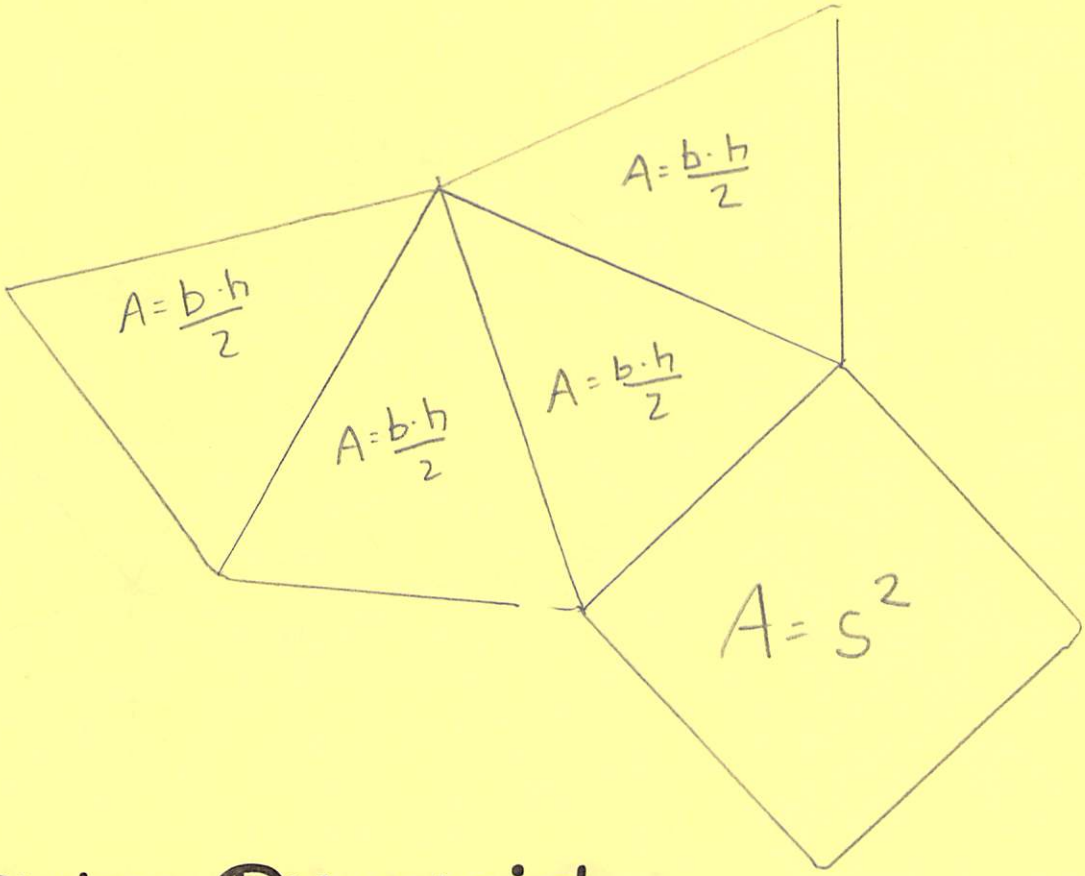
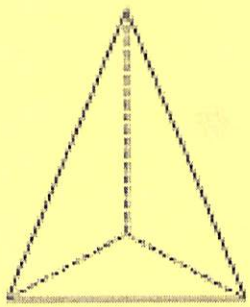
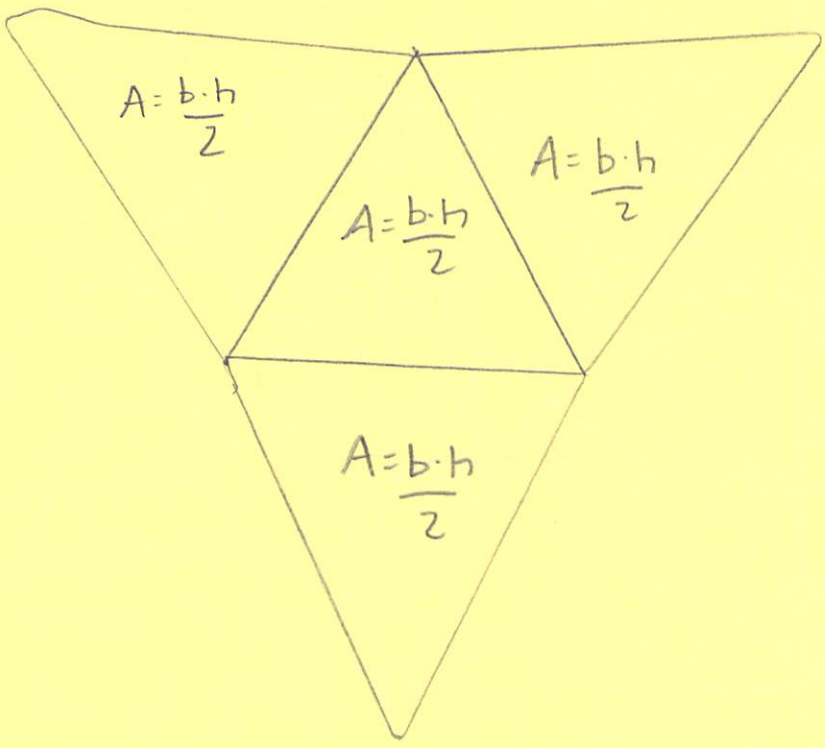
Square Pyramid



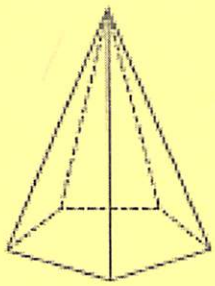


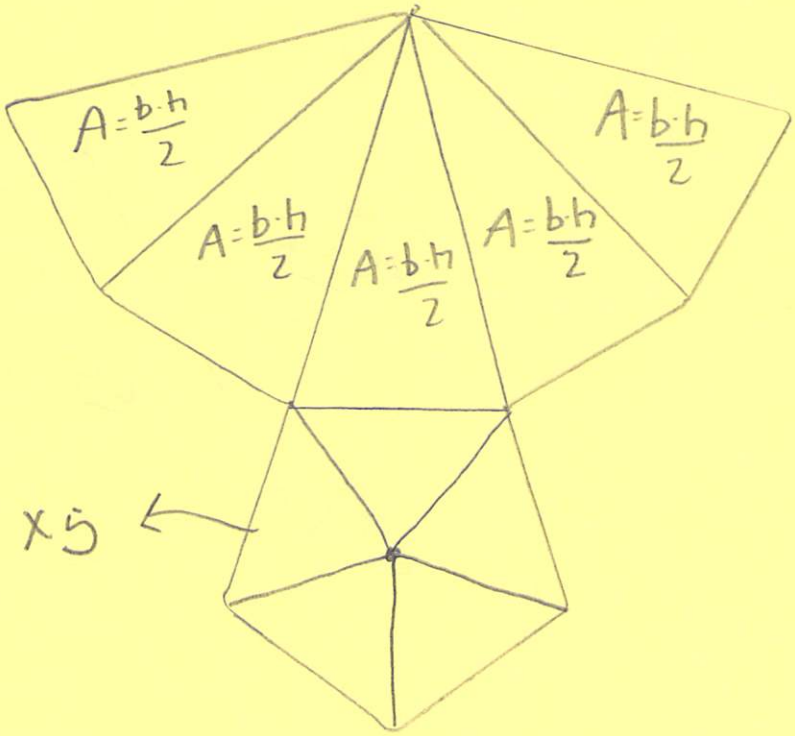
Triangular Pyramid



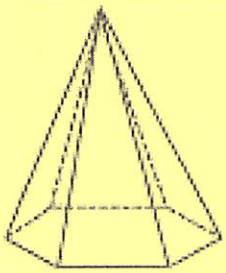


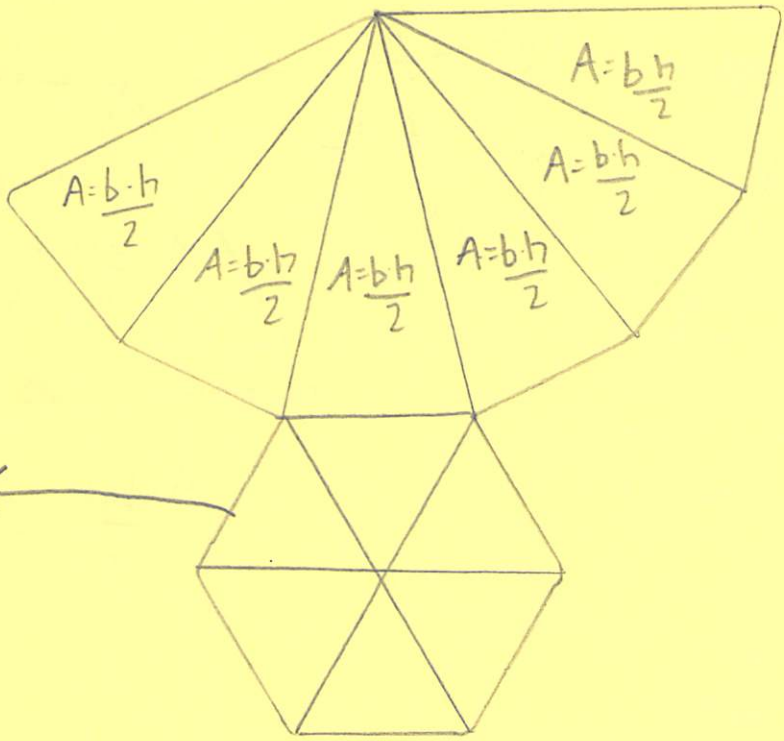
Pentagonal Pyramid





Hexagonal Pyramid





Three Dimensional Shapes

ABOUT FACE

Complete the chart

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Triangular Prism						
Pentagonal Prism						
Hexagonal Prism						
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Triangular Pyramid						
Pentagonal Pyramid						
Hexagonal Pyramid						

EULER'S FORMULA

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Hexagonal Prism			
Square Pyramid			
Triangular Pyramid			
Pentagonal Pyramid			
Hexagonal Pyramid			

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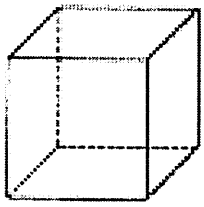
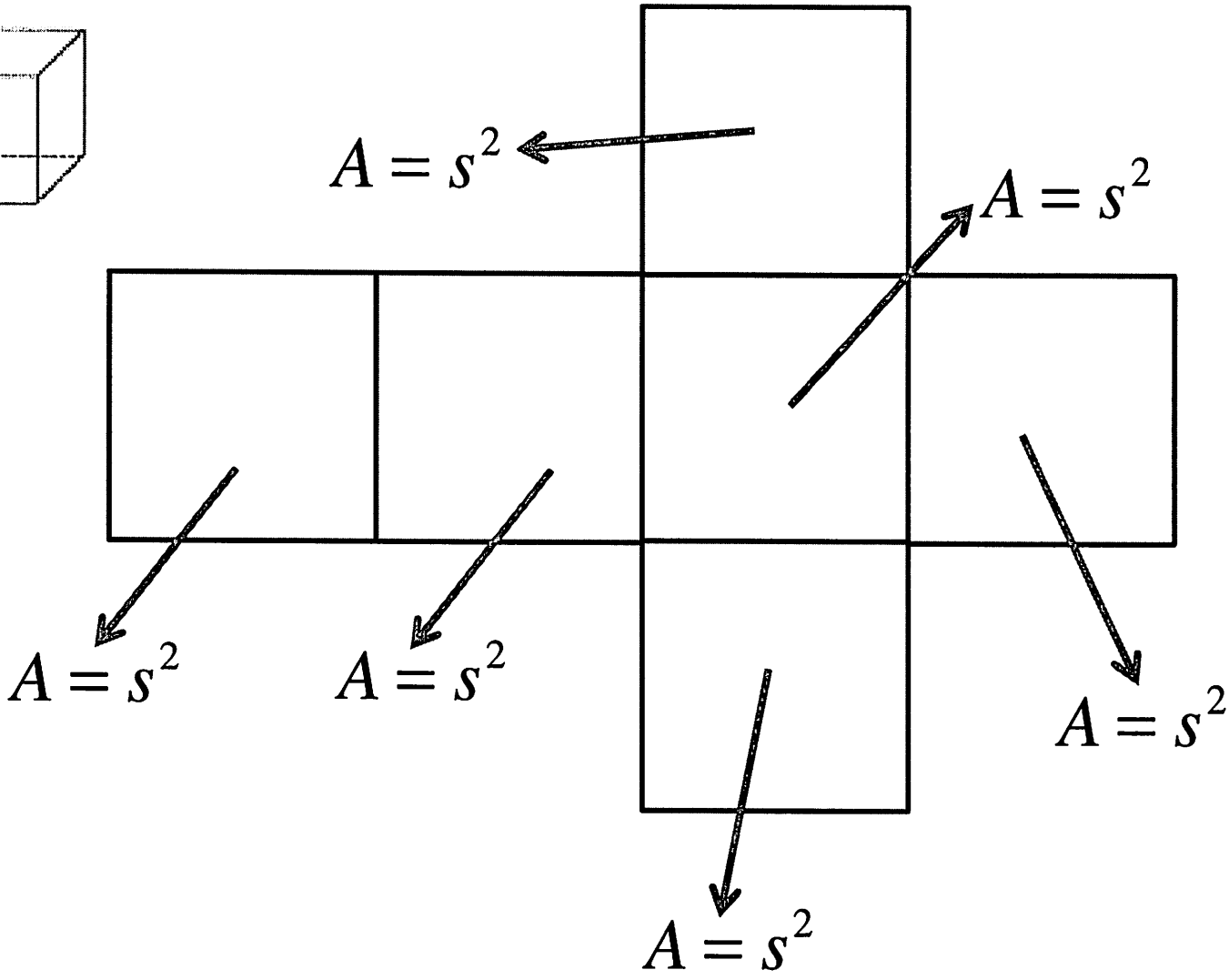
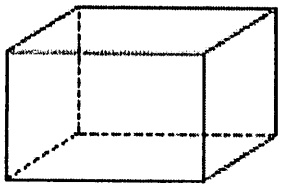
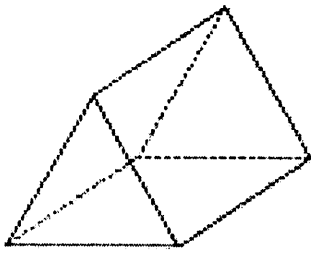




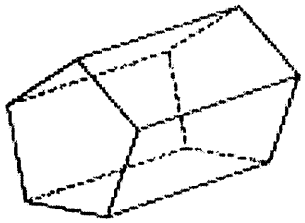
Rectangular Prism



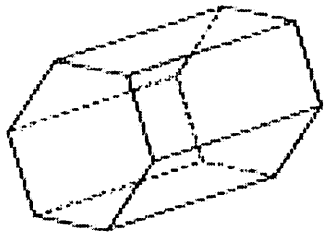
Triangular Prism



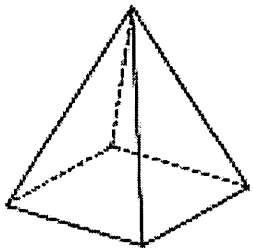
Pentagonal Prism



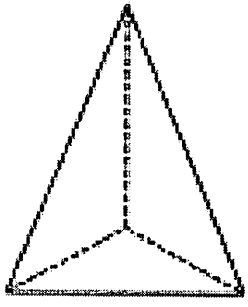
Hexagonal Prism



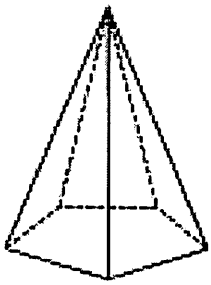
Square Pyramid



Triangular Pyramid



Pentagonal Pyramid



Hexagonal Pyramid