

NETS TO SURFACE

Today you will be asked to find the surface area of two three-dimensional figures using nets.

You will have 45 minutes to complete all parts of the assessment. The assessment questions are on pages 3 and 4 in this booklet. You will work through them on your own.

The Teacher Scoring Rubric that will be used to evaluate your calculations and reasoning is shown below. Be sure to review the Exceeding Expectations column.

Teacher Scoring Rubric—Student Version			
Dimensions	Not Yet Meeting Expectations	Meeting Expectations	Exceeding Expectations
Concepts and Procedures	I can solve part of the problem, but I am confused in some places and have calculation mistakes.	I can solve the problem using strategies that make sense with few calculation mistakes.	I can solve the problem efficiently and accurately without any calculation mistakes.
Modeling and Using Tools	I can interpret a model and/or create a partial model to represent a real-world math concept or relationship, but it is inaccurate or incomplete.	I can create and/or interpret a model to represent a real-world math concept or relationship.	I can accurately create and/or interpret a model to represent a real-world math concept or relationship.

You will have the remainder of this class as well to complete this assessment.

Do you have any questions about what you are expected to do?

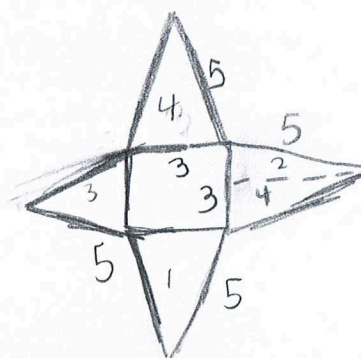
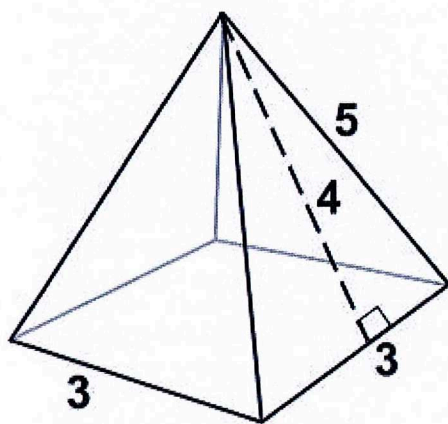
You may now begin. Remember, you have the rest of this class period to complete this assessment.

When time is up, please pass your Student Booklet to your teacher.

STUDENT MATERIALS

PROBLEM 1 – NETS TO SURFACE

Aidan is replacing the material of his small triangular tent. To do that, he needs to find the surface area. Draw a net of this tent and use it to find the surface area. Make sure to label measurements on your drawing.



$$3 \times 3 = 9 = \square$$

$$3 \times 4 = 12 \div 2 = 6 = \triangle$$

$$SA = 33$$

$$\begin{array}{l} \text{triangle} \\ 6 \times 4 = 24 \end{array}$$

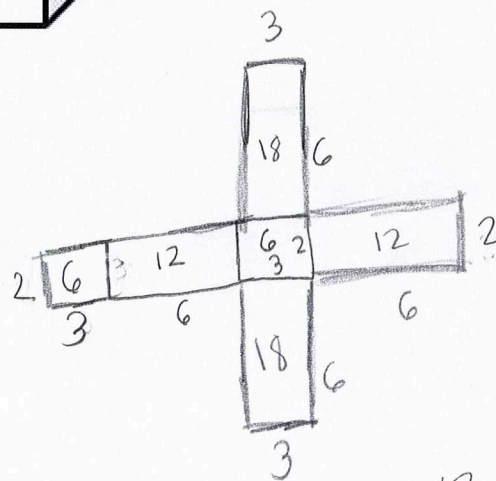
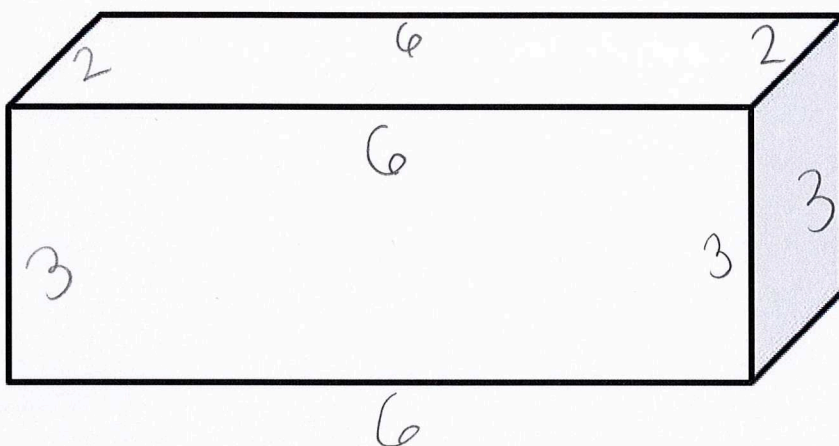
$$\begin{array}{r} 24 \\ + 9 \\ \hline 33 \end{array}$$

PROBLEM 2 – NETS TO SURFACE

Label the rectangular prism below with your choice of measurements. (You don't need to measure the segments; you can choose the numbers).

Draw the net of the prism and label the measurements with the corresponding numbers you labeled on the image.

Use the net to find the surface area of the prism.



$$SA = 72$$

$$\begin{array}{r} 12 \quad 30 \\ \swarrow \quad \searrow \\ 6+6+18+18+12 \\ 12= \\ 30 \\ 30+30+12=72 \\ 60+12=72 \end{array}$$