1) Follow checklist
2) Module 15 out
3) Journal/paper & pencil out
4) Warm Up:
   a) how do we calculate volume?
   b) how do we calculate surface area?
6 steps to Geometry Success!

1) What is the ________? Examples: 

2) What am I being asked to ________?

OR What is ________? Examples: 

3) Write the correct _________. Use a reference sheet.

4) Plug in known _________. Find missing measurements.

5) Solve the _________. Follow math rules: order of operations, inverse operations, properties of operations

6) Give full & complete answers: yd², in², feet, etc.

Don’t forget to check your work!

** With composite figures you may have to add more than one area together or subtract a section from a shape to find the total area.
1. \( \frac{1}{2}(3)(5 + 7) \)  
   \( = 18 \)  

2. \( \frac{1}{2}(15)(13 + 17) \)  
   \( = 225 \)  

3. \( \frac{1}{2}(10)(9.4 + 3.6) \)  
   \( = 65 \)  

4. \( \frac{1}{2}(2.1)(3.5 + 5.7) \)  
   \( = 9.66 \)  

**Area of Squares, Rectangles, Triangles**

**EXAMPLE**  
Find the area of the rectangle.  
8 ft 3 ft  
\[ A = bh \]  
Use the formula for area of a rectangle.  
\[ = 8 \cdot 3 \]  
Substitute for base and height.  
\[ = 24 \]  
Multiply.  
Area equals 24 square feet.

Find the area of each figure.

5. a triangle with base 6 in. and height 3 in.  
   \[ = 9 \text{ in}^2 \]  

6. a square with sides of 7.6 m  
   \[ = 57.76 \text{ m}^2 \]  

7. a rectangle with length 3\( \frac{1}{2} \) ft and width 2\( \frac{1}{2} \) ft  
   \[ = 8\frac{1}{8} \text{ ft}^2 \]  

8. a triangle with base 8.2 cm and height 5.1 cm  
   \[ = 20.91 \text{ cm}^2 \]
**Understand Vocabulary**

Complete the sentences using the preview words.

1. The total area of all the faces of a three-dimensional figure is called the **surface area**.

2. A model that looks like an unfolded three-dimensional figure is a **net**.

3. A three-dimensional shape with a polygon for a base and triangles for sides is a **pyramid**.
Cube Activity - paper, pencil, mod 15 only

1) Calculate the volume \( V = lwh \)
2) What is Surface Area? How do you find S.A.?

\[
V = lwh \\
V = 3\text{in} \cdot 3\text{in} \cdot 3\text{in} \\
V = 9\text{in}^2 \cdot 3\text{in} \\
V = 27\text{in}^3
\]
Surface Area (S. A.):
the total area of the surface of a 3D object.

\[ A = lw \]
\[ A = 3\text{ in} \cdot 3\text{ in} \]
\[ A = 9\text{ in}^2 \times 6 \text{ faces} \]

Total Surface Area: 54 in\(^2\)
Read pgs. 419-422
Complete pgs. 423

Use your resources, online textbook, take your time, pop quizzes could happen!