NAME_____

Module 13 **Perimeter, Area, and Volume**
Lesson 2 **Area**

Lesson Notes 13.2

Lesson Objectives

- Establish and apply formulas to find the area of triangles and different types of quadrilaterals.
- Develop and use strategies to solve problems involving the area of quadrilaterals and the area of a circle.
- Demonstrate understanding of when to use linear units to describe perimeter and square units to describe area.
- Find different areas for a given perimeter and find different perimeters for a given area.

Subtopic 1 Area of Rectangles and Parallelograms

Area

The number of _____ _____ or the amount of space in a region

Area of a _____

$A = s^2$

Area of a Rectangle

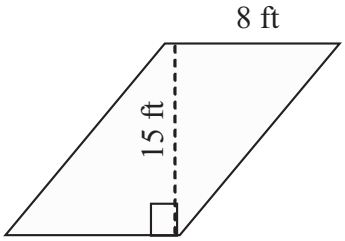
$A =$ _____

Area of a Parallelogram

$A =$ _____

1 Find the area of the window.

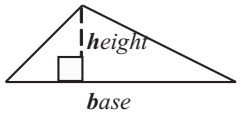
2 Find the area of the parallelogram where the base is eight feet and the height is 15 feet.



Subtopic 2 Area of Triangles, Trapezoids, and Circles

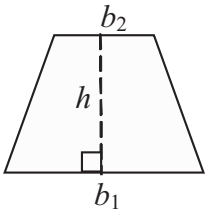
Area of a Triangle

$A =$ _____



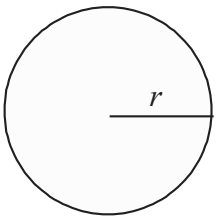
Area of a Trapezoid

$A = \frac{1}{2}($ _____ $)h$

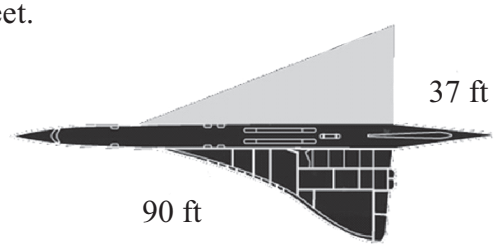


Area of a _____

$A =$ _____



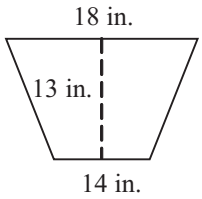
3 Find the area of the triangular wing of this plane which has a base of 90 feet and a height of 37 feet.



NAME_____

Module 13 Perimeter, Area, and Volume
Lesson 2 Area

4 A cafeteria tray is shaped like a trapezoid. Find the area of the tray.



5 A circular swimming pool cover has an area of 452.16 square feet. Estimate the diameter of the swimming pool cover.

Subtopic 3 Find Different Areas for a Given Perimeter

6 Luria bought an astro-cow. What is the smallest number of one-yard fencing sections she needs to enclose a rectangular pasture containing 36 square yards of astro-turf?