




Geometry: Calculate Area

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Geometry and Measurement

7th grade
Missouri Learning
Standards (MLS)

7.GM.B.6.a



Objective

Apply and extend previous understanding of angle measure, area and volume.

Understand the relationship between area, surface area and volume.

- a. Find the area of triangles, quadrilaterals and other polygons composed of triangles and rectangles**

Key Learning Point

- **The students will be able to find the area of quadrilaterals and other polygons composed of triangles and rectangles.**

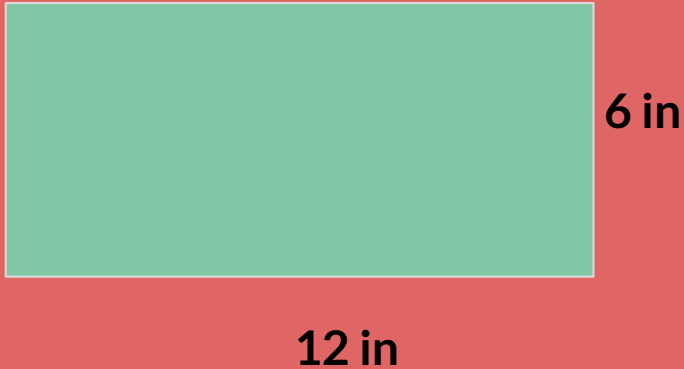


Prior Knowledge Needed

- Students will need to know how to read and write.
- Students will need to know how to set up a fraction.
- Students will need to know how to multiply fractions.

Area of a Rectangle

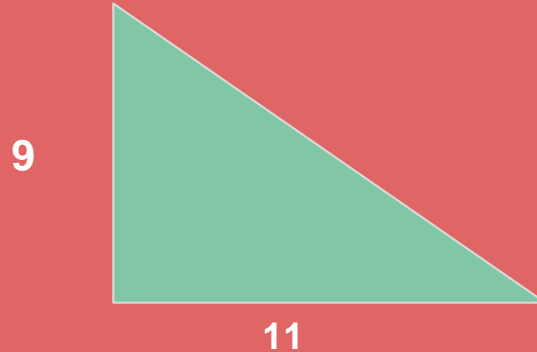
The area of a rectangle is (Area = Base x Height)



For this rectangle we would take the Base (12 in) x Height (6 in) = Area (72 square in)

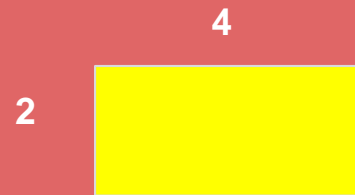
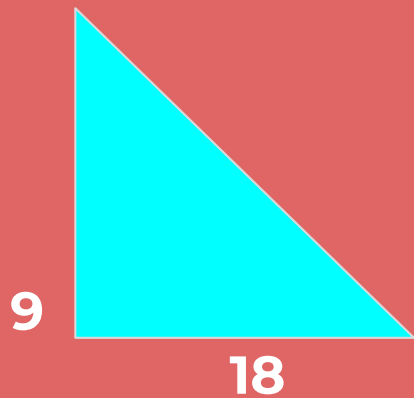
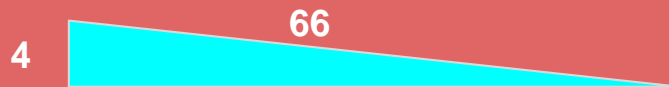
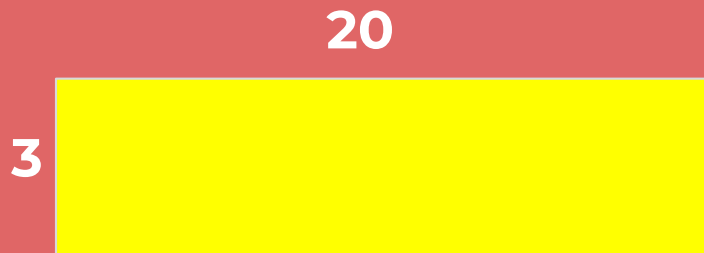
Area of a Triangle

Area of a triangle $\frac{A=h_b b}{2}$



So for this triangle we would take the Base (11in) x Height (9in) = (99 square in)
Then we have to take 99/2 which = 49.5 square inches.

YOUR TURN





Let's try it on your own.

Students must find 4 objects (2 rectangle, 2 triangle) at their house and calculate the area. 1 of the rectangles must be their home. Use your steps to calculate that size. (use each step as an estimated 3 foot). Round to the nearest foot.

If you are having trouble finding a triangle, use rooms in your house.

All calculations need to be written down. Circle your final answers.