Area Essay

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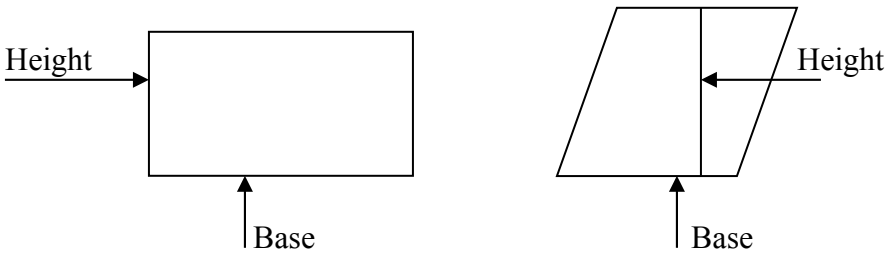
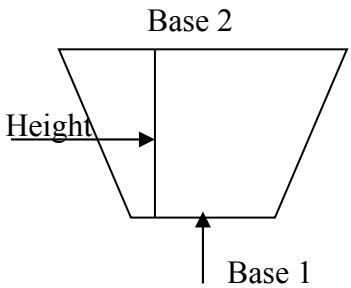
7D

The formulas for a parallelogram and a rectangle are exactly the same. They both are bh, which means base times height. The only difference between them is that on a rectangle that height and the base is obvious, but on a parallelogram one must find the height.

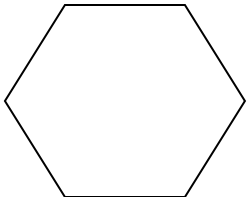


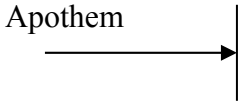
The height in the parallelogram is not its side, but a line from the base going straight up. The base in the rectangle and the parallelogram are the same.

The area for a trapezoid and the area for a square are similar. The area for a trapezoid is [(b1+b2)h]/2. There are two bases in a trapezoid: the top and the bottom, and to find the height one must do the same thing they did to find the height in a parallelogram: draw a straight line from one of the bases to the other one.

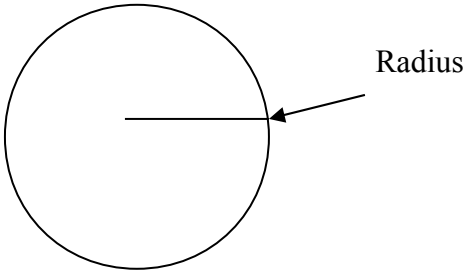


For all of the regular polygons the area is the same: apothem times 1/2 of the perimeter (1/2pa). The apothem is a line going from the center of the polygon to a point in the side of the shape.





A circle is very different from a rectangle because it doesn't have any angles. The formula for a circle is "pi"r^2. Pi is 3.14, and so you have to multiply that by the radius and then square it.



In conclusion, all of these area formulas come out to the same thing: the area (or circumference) of all of these shapes. Most of the formulas have something in common with the area formula for a rectangle. +