

CHAPTER M

Perimeter: The distance around the outside of a figure with straight sides
To find the perimeter, sum (add) the measurements of each side

Area: Refers to the number of square units the figure covers. The area is the inside shape or space measured in square units. You need to remember to square your units of measurement.

Quadrilateral: a closed figure with 4 sides $(A = bh)$

Parallelogram: a quadrilateral whose opposite sides are parallel
Area = base x height $(A = bh)$

* The height must be perpendicular to the base. It doesn't have to be the length of one of the sides.

Triangles: $Area = \frac{1}{2} \times Base \times Height$ $(A = \frac{1}{2}bh)$

Diameter: the distance through the center of the circle from one side to the other (d)

Radius: the distance from the center to one side of the circle (r)

$$2 \text{ radius} = \text{diameter}$$

$$2r = d$$

$$Pi (\pi) = \frac{\text{circumference}}{\text{diameter}} \approx 3.14 \text{ or } \frac{22}{7}$$

Circumference: The distance around the outside of a circle $C = 2\pi r$ $(2 \times \pi \times r)$

Area of a circle: $A = \pi r^2$

*In the ilearn program, if it gives you π as a fraction, you must give your answer as a fraction. If ilearn gives you π as a decimal, your answer needs to be in decimal form.

Volume: the number of cubic units in a 3- dimensional figure

Volume of a rectangular prism: Volume = length x width x height $(V = lwh)$

You need to remember to cube your units of measurement.

Volume of Circular Cylinders: Volume = area of the base (circle) x height $(V = Bh)$

Pythagorean Theorem: $a^2 + b^2 = c^2$

Hypotenuse: The longest side of a right triangle, opposite the right angle

Formula Reference Sheet

http://mdk12.org/share/pdf/hsa_math_reference_sheet_v2.pdf

Need more help or more practice:

Area and Perimeter:

<http://www.khanacademy.org/math/geometry/basic-geometry/v/area-and-perimeter>

Area of a parallelogram

<http://www.khanacademy.org/math/geometry/polygons-quads-parallelograms/v/area-of-a-parallelogram>

Area of a circle

<http://www.khanacademy.org/math/geometry/basic-geometry/v/area-of-a-circle>

Volume

<http://www.khanacademy.org/math/geometry/basic-geometry/v/solid-geometry-volume>

Pythagorean theorem

<http://www.khanacademy.org/math/algebra/ck12-algebra-1/v/pythagorean-theorem>

practice problems: <http://www.khanacademy.org/math/algebra/pythagorean-theorem/e>