

### Theorems & Postulates

area addition postulate the area of a region is equal to the sum of the areas of its nonoverlapping parts

### Formulas

area of a parallelogram	area = $bh$
area of a triangle	area = $\frac{1}{2}bh$
area of a trapezoid	area = $\frac{(b_1 + b_2)h}{2}$
area of a rhombus or kite	area = $\frac{1}{2}d_1d_2$
volume of a triangular prism	volume = base * height
volume of a rectangular prism	volume = length <i>width</i> height
volume of a cube	volume = edge length <sup>3</sup>
volume of a cylinder	volume = area of the base * height

### Vocabulary

composite figure	a figure made up of simple shapes, such as triangles, rectangles, trapezoids, and circles
face	the flat surfaces of a 3D solid
edge	a segment that is the intersection of two faces
vertex	a point of intersection of three or more faces
prism	formed by two parallel congruent polygonal faces called bases connected by faces that are parallelograms
cylinder	formed by two parallel congruent circular bases and a curved surface that connects the bases
pyramid	formed by a polygonal base and triangular faces that meet at a common vertex
cone	formed by a circular base and a curved surface that connects the base to a vertex
cube	a prism with six square faces
net	a diagram of the surfaces of a 3D figure that can be folded to form the 3D figure
cross section	the intersection of a 3D figure and a plane

### Vocabulary (cont)

volume the number of nonoverlapping unit cubes of a given size that will exactly fill the interior

