

Unit: 1. SIMILAR POLYGONS

VOCABULARY

altitude of a triangle	An altitude of a triangle is a perpendicular line from a vertex to the opposite side.
cosine ratio	With respect to an acute angle of a right triangle, the ratio of the side adjacent to the angle over the hypotenuse.
diagonal of a rectangular solid	A segment whose endpoints are not in the same plane.
faces	The sides of a solid figure.
geometric mean	For any positive real numbers a , b , and x , if $\frac{a}{x} = \frac{x}{b}$ then x is called the geometric mean between a and b . Notice that $x^2 = a \cdot b \text{ or } x = \sqrt{a \cdot b}$
Projection of a point on a line	The point where a perpendicular through the point to the line intersects the line.
Projection of a segment on a line	The portion of a line with endpoints that are the projections of the endpoints of the segment.
proportion	An equation that states that two ratios are equal.
ratio	The comparison of two numbers by division. The quotient is the ratio of the two numbers.
rectangular solid	A solid figure whose faces are all rectangles.
similar polygons	(\sim) Polygons whose vertices can be matched in 1:1 correspondence so that corresponding angles are equal and corresponding sides are in proportion.

sine ratio

With respect to an acute angle of a right triangle, the ratio formed by the side opposite the acute angle over the hypotenuse.

tangent ratio

With respect to an acute angle of a right triangle, the ratio of the side opposite the acute angle over the side adjacent to the acute angle.