

Geometry - Chapter 10 Review

10-1 Be able to find the area of a:  
parallelogram, triangle, equilateral triangle

10-2 Be able to find the area of a:  
trapezoid, rhombus, kite

10-3 Be able to find the area of a:  
regular polygon

10-4 Be able to find the perimeter and area of two similar figures

10-5 Be able to find the area of a polygon using the sin/cos/tan.  
Use the 11 steps shown/demonstrated in class.

10-6 Be able to find the measure and length of an arc of a circle

10-7 Be able to find the area of either:  
a circle, sector or segment

### Area Formulas

square

$$A = s^2$$

rectangle

$$A = b * h$$

triangle

$$A = \frac{1}{2} b * h$$

trapezoid

$$A = \frac{1}{2} * (b_1 + b_2)$$

equilateral triangle

$$A = s^2 \text{ radical three}/4$$

any polygon

$$A = \frac{1}{2} * ap$$

any triangle

$$A = \frac{1}{2} * ab * \sin C$$

rhombus

$$A = (d_1 * d_2)/2$$

kite

$$A = (d_1 * d_2)/2$$

"SOH CAH TOA"

$$\sin = \text{opp/hyp} \quad \cos = \text{adj/hyp} \quad \tan = \text{opp/adj}$$

circle area

$$A = \text{PI} * r^2$$

circle circumference

$$C = 2\text{PI}r$$

circle sector

$$A = x/360 * \text{PI}r^2$$

circle arc length

$$\text{length} = x/360 * 2\text{PI}r$$

Vocabulary: adjacent arcs, altitude of a parallelogram, apothem, arc length, base of a parallelogram, base of a triangle, center of a circle, central angle, circle, circumference, concentric circles, congruent circles, diameter, height of a parallelogram, height of a trapezoid, height of a triangle, major arc (3 letters), minor arc (2 letters),  $\pi$ , radius, radius of a regular polygon, sector of a circle, segment of a circle, semicircle