

Geometric Measure and Coordinate Geometry Ch 10

Grade 8

10-2 Perimeter and Missing Dimensions

- Use formulas to find perimeters of regular polygons
- Be able to find missing dimensions given the perimeter of a polygon
- Identify corresponding parts of similar Polygons and compare their perimeters.

10-3 Area of Polygons

- To use area formulas to compute areas of triangles, parallelograms, and trapezoids.
- To use area formulas to find the missing dimensions of triangles, parallelograms, and trapezoids.

Formulas

Polygon	Formula
Parallelogram	$A = b * h$
Triangle	$A = \frac{1}{2} b * h$
Trapezoid	$A = \frac{1}{2} h * (b_1 + b_2)$

10 – 4 Circumference and Area of Circles

- Be able to find the circumference and area of a circle
- Be able to find the missing dimensions of a circle given the area or circumference.

Formulas

	Formula
Circumference	$C = 2\pi r$ $C = \pi d$
Area	$A = \pi r^2$

10-5 Area of Complex Figures

- Be able to find the area of irregular shapes involving polygons and circles.

10-6 Area and Missing Dimensions

- Be able to find the missing dimensions given the area of the polygon.

10 -7 Coordinate Plane and Polygons (Don't put the graph paper away yet!)

- Be able to graph polygons on the coordinate plane.
- To use perimeter, area formulas and the Pythagorean Theorem to polygons on the coordinate plane.
- Be able to use the formula for the slope of a line to find missing dimensions of a polygon. Remember:

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

10 – 8 Coordinate Plane: Reflections and Translations

- Be able to transform plane figures using reflection and translations.
- Be able to reflect an image over the x axis
- Be able to reflect an image over the y axis

10 – 9 Coordinate Plane Rotations

- To transform plane figures using rotations
- Be able to rotate a figure 90, 180 and 270 degrees.

10-10 Coordinate Plane: Dilations

- Be able to reduce and enlarge a plane figure.