

POWER STANDARDS – GEOMETRY

Please note: Estimation and problem solving strategies should be included in number sense/computation, measurement and algebra standards.

NUMBER SENSE/COMPUTATION

Number Operations

- _____ Solve problems involving proportional reasoning. **GE-01**
 - scale drawing
 - indirect measurement
 - length and angle measurement in similar figures

MEASUREMENT

Draw, Measure, and Estimate Angles.

Solve Problems Involving:

- _____ length, width, height, angle measures or sums of angle measures. **GE-02**
- _____ area, perimeter/circumference, volume and surface area. **GE-03**
 - polygons
 - polyhedra
 - circles
 - composite shapes
- _____ indirect measurement. **GE-04**
- _____ scale drawings. **GE-05**

ALGEBRA

Apply Formulas

- _____ distance **GE-06**
- _____ midpoint **GE-07**
- _____ area, volume, surface area **GE-08**

GEOMETRY

Coordinate Geometry

- _____ Graph points and figures (four quadrants). **GE-09**
- _____ Calculate distance, midpoint coordinates, and slope. **GE-10**

Transformations

- _____ Analyze results of a combination of transformations. **GE-11**
- _____ Represent and identify geometric figures using coordinate geometry including those resulting from transformations. **GE-12**

Recognize and Apply 2-D and 3-D Properties and Relationships

- _____ Identify, compare and contrast polygons and polyhedra. **GE-13**
- _____ Solve problems involving 2-D, combinations of 2-D shapes, and 3-D shapes. **GE-14**
- _____ Solve problems involving Triangle inequality. **GE-15**
- _____ Solve problems involving Right triangles. **GE-16**
- _____ Solve problems involving Pythagorean Theorem. **GE-17**
- _____ Use relationships between pi, radius, diameter, circumference. **GE-18**
- _____ Identify and use medians, altitudes, angle bisectors, perpendicular bisectors and midlines of triangles. **GE-19**

Lines, Segments, Rays, and Angles

- _____ Use angle relationships formed by parallel lines cut by a transversal and radii of a circle to solve problems. **GE-20**
- _____ Use angle measures and sums of angle measures in geometric figures to solve problems. **GE-21**

Justifications of Conjectures and Conclusions

- _____ Justify simple construction methods using geometric principles. **GE-22**
- _____ Prove congruence and similarity. **GE-23**

Trigonometry

- _____ Apply sine, cosine, and tangent functions. **GE-24**