

Geometry Test- Topics to Review

1st 9 weeks: (15 questions)

- Points, lines (segments, rays, parallel, perpendicular, skew), planes
- Angles: complementary, supplementary, straight, vertical, acute, right, obtuse, straight, alternate interior/exterior, corresponding, consecutive, etc.
- Distance between two points
- Geometric patterns
- Identify hypothesis and conclusion
- Properties of congruence
- Counterexample
- Equation of line parallel and/or perpendicular to given line

2nd 9 weeks: (17 questions)

- Postulates/ theorems for similar and congruent triangles
- Missing angle/ side lengths of a triangle and of similar triangles
- Identify possible triangle by 3 given lengths
- Identify longest/shortest side of triangle based on angle measures
- Parts of a triangle: vertex, mid-segment, altitude, side, perpendicular bisectors, etc.
- Using 2 side lengths of a triangle, find range of possible length of 3rd side
- A quadrilateral's sides are described by expressions. Using properties of the shape, students solve two systems of equations to solve for two variables.
- Find missing angles of a quadrilateral using known properties
- Find coordinates of a fourth point of a quadrilateral using known properties
- Know properties about quadrilaterals including information about the diagonals
- Manipulate proportions to find other equivalent proportions

3rd 9 weeks: (18 questions)

- Geometric mean
- Right triangles: Pythagorean Theorem, properties of 30-60-90 triangles, 45-45-90 triangles
- Trig ratios
- Given two legs, find an angle using trig functions
- Given a side and angle, find another side length using trig functions
- Circles: calculate area, circumference
- Area and perimeter of polygons including irregular shapes
- Find a dimension of a polygon using a given area and properties of the polygon
- Find area with given perimeter/circumference and vice-versa
- Volume/surface area of pyramids/cones/cylinders/spheres

4th 9 weeks: (8 questions)

- Arcs
- Inscribed angle measurements
- Parts of a circle
- Find angle measures given arc measures
- Transformations on a coordinate graph