

Geometry Study Guide Chapter 10 & 11 Area, Volume, etc.

10-1 & 10-2 Area

1. Do you have your Virginia SOL "Geometry Formula Sheet?" Do you understand the letters?
2. Are you able to find the area of a rhombus or a kite by splitting them up into triangles?
3. Do you understand how to do these problems? p619; #8, 15, 16, 19, 43; p626 #11, 18, 21, 33

10-3 Areas of Regular Polygons

1. What is meant by a "regular" polygon?
2. Do you remember how to find out how many degrees are in each angle of a regular polygon?
3. What is an apothem? What is a radius? Can you use right triangle knowledge to calculate them?
4. Are you able to find the area of pentagons, hexagons, and octagons by splitting them up into triangles?
5. Do you understand how to do these problems? p632; #17, 23

10-4 Perimeter & Area of Similar Figures

1. Which are 1-D or 2-D measurements? Side length, scale factor, perimeter, area
2. If you know the scale factor of 2 similar figures, how do you find the ratio of their perimeters? How do you find the ratio of their areas?
3. If you are given both areas, can you find the scale factors?
4. If you are given the scale factor and one area, can you find the other area?
5. Do you understand how to do these problems? p638; #11, 15, 25, 30

The first test covers this material.

10-6 & 10-7 Circles: Arcs, Sectors, & Segments

1. What is a minor and a major arc? How are the measurements of the central angle and arc related?
2. How do you calculate circumference of a circle? The length of an arc?
3. What is a sector? What is a segment?
4. How do you calculate area of a circle? A sector?
5. How do you calculate the area of a segment? Do you remember how to use Trig to find the triangle's area?
6. Do you understand how to do these problems? p655; #16, 25, 31. p. 663; #7, 15, 23

10-5 Trigonometry & Area

1. What mode should your calculator be in? What combination of Sides and Angles is required for this method?
2. Do you know how to find central angles of regular pentagons, hexagons, and octagons?
3. Do you understand how to apply this topic to **Section 10-7** Segments of Circles?
4. Do you understand how to do these problems? p646 #1, 2, 8, 18, 24, 25; p664 #23, 25, 45

11-2 & 11-4 Prisms & Cylinders

1. What is meant by Base? By Side? How do you identify which is which?
2. What is the difference between Lateral Area & Surface Area?
3. When the formula sheet uses the letter B , what does it stand for? How about p , h , & r ? When finding perimeter, what part of the figure area you calculating?
4. How do you calculate B for a triangle? Square? Regular hexagon?
5. Do you understand how to do these problems? p704; #7, 9, 10, 15, 17. p. 721; #7, 11, 15

Reviewed _____
Parent/Guardian

11-3 & 11-5 Pyramids & Cones

1. What is the difference between height (h) and slant height (l)? How are they related? How do you calculate them if you don't know them?
2. How do you calculate B ? How do you find p ?
3. Do you understand how to do these problems? p713; #11, 13, 17, 19. p. 730; #9, 13, 19

The second test covers the entire chapter.

11-6 Spheres

1. Do you understand how to do these problems? p737; #11, 17, 19, 30

11-7 Area & Volume of Similar Solids

1. Which are 1-D, 2-D, or 3-D measurements? Side length, scale factor, surface area, volume
2. If you know the scale factor of 2 similar shapes, how do you find the ratio of their areas? How do you find the ratio of their volumes?
3. If you are given both areas, can you find the scale factors? How about if given both volumes?
4. If you are given the scale factor and one area, can you find the other area? How about for volume?
5. If only 1 measurement changes (e.g., doubling the diameter of a cylinder), how does that impact volume?
6. Do you understand how to do these problems? p746; #5, 11-13, 15, 19, 34-37

REVIEW: Chapter Review p. 676-680 & 751-754; Vocabulary; Notes; Homework; Classwork; Quizzes