

**Common Core Geometry – Regents Review – Session One – Answer Key**

1.  $V = 9,145\sqrt{3}\pi m^3$
2. 14.5"
3.  $11.75\pi ft$
4.  $AG = 4$
5.  $40^\circ$
6.  $252\pi m^3$
7.  $277\sqrt{3}\pi m^3$
8. Construction
9.  $K'(2,0), L'(2,3), X'(4,0)$
10.  $\angle 6, \angle 2, \angle 3$
11.  $\angle 1, \angle 4, \angle 7$
12.  $\angle 6 \& \angle 3, \angle 1 \& \angle 7, \angle 5 \& \angle 4, \angle 8 \& \angle 2.$
13.  $(x+3)^2 + (y-8)^2 = 196$
14.  $(15, -6)$
15.  $y = 2x - 1$
16.  $D_{\frac{1}{2}}, T_{-8, -2}$
17.  $\left(\frac{3}{2}, -5\right)$
18.  $U'(4,6), R'(10,6), P'(10,2), A'(4,2)$
19. 14
20.  $70^\circ$
21. 11.6
22.  $100^\circ$
23.  $(x-1)^2 + (y-4)^2 = 26$
24. No
25.  $(x-1)^2 + (y-4)^2 = 26$
26.  $49^\circ$
27.  $51^\circ$
28.  $360^\circ$
29.  $45^\circ$
30. 9 sides
31.  $(x-4)^2 + (y-4)^2 = 44$   $C:(4,4)$   $r = 2\sqrt{11}$
32.  $(x-4)^2 + (y+4)^2 = 170$
33.  $(x+5)^2 + (y-4)^2 = 16$
34. 2.5
35. 29'
36. 45
37. 1
38. 4
39. 88 feet
40. 91.5 feet
41. 2
42.  $55^\circ, 50^\circ, 80^\circ$
43. AB is parallel to DC because Alternate Interior angles are congruent.
44.  $20^\circ, 59^\circ, 101^\circ$
45. 1

**46.**  $110^\circ$

**47.** 4

**48.** 3

**49.** 3

**50.** 58

**51.**  $70^\circ$