Revised May 2008

Geometry A Final Review Answers

1) Divide by –2: ½, -¼
2) Add the 2 previous numbers to get the next number: 5, 8
3) A, B, C
4) A, B,C, D
5) B
6) A,B,D,E or B,C,D,E or A, C (E, D or B)
7) a. 1 b. infinitely many solutions c. 1 d. 1
8) $2500\pi + 21{,}200$
9) never
10) sometimes
11) never
12) always
13) never
14) 10
15) a. (11,19) b. Show your work using dist formula
16) AB = 5, AC = $\sqrt{10}$, BC = 5 P= 10 + $\sqrt{10}$
17) A= $10\frac{7}{24}$ m^2, P = $13\frac{5}{12}$ m
18) A 12.25 in^2, P= 14 in
19) A= 36π cm^2, P =12π cm
20) 7
21) 9
22) perpendicular bisector
23) VW
24) 7
25) AY
26) E, AY
27) If a human is a baby, then s/he is cute.
28) hyp: x+9=11 Con: x=2
29) If two angles are obtuse, then they are not complementary.
30) If a figure has two right angles, then it is a rectangle.
31) If two lines do not intersect, then they do not lie in the same plane.
32) $m\angle ABC + m\angle DEF = 90$
33) If the three angles of a triangle are acute, then they are less than 90.
34) biconditional
35) If there is snow, then it is below freezing.
If it is below freezing, then there is snow.
36) A=64π C=16π .
37) Substitution prop of equality (or Transitive prop of equality)
38) Subtraction prop of equality
39) Reflexive prop of congruence
40) Multiplication prop of equality
41) Symmetric prop of congruence

42) 135°
43) 135°
44) 180°
45) 45°
46) 180°
47) 90°
48) 180-2z
49) 71°
50) answers vary
51) answers vary
52) If a fish is a bluegill, then it is a bluish freshwater sunfish.
If a fish is a bluish freshwater sunfish, then it is a bluegill.
53) congruent
54) no conclusion
55) James must graduate from college.
56) $p \rightarrow r$ is a true statement
57) q is a true statement
58) no conclusion
59) m<1= 65° If // cut by a trans, corresponding angles are congruent;
m<2= 65° If // line cut by a trans., alternate interior angles are congruent.
60) m<1 = 85°, If // line cut by a trans., alternate interior angles are congruent.
m<2 = 110°, If // line cut by a trans., consecutive interior angles are supp.
61) m<1 = 85°, If // line cut by a trans., cooresponding angles are congruent.
m<2=95°, If // line cut by a trans., consecutive interior angles are supp.
62) m<1 = 110°, Supplementary angles add up to 180°. m<2=70°, If // line cut by a trans., consecutive interior angles are supp.
63) 5
64) 25
65) 6
66) A=152 m^2 , P =56 m
67) a. given b. If // line cut by a trans., corresponding angles are congruent. c. given
d. transitive prop of congruence e. If corresponding angles are congruent, lines are //.
68) y + 1 = -5(x – 3)
69) 40
70) 720°
71) 109^o
72) x = 85°, y =100°, z =100°
73) perpendicular
74) //
75) neither
76) perpendicular
77) 30°
78) ΔPAY ≅ ΔAPL
79) ΔNOE ≅ ΔSOE

80) SAS
81) HL
82) NP
83) SSS
84) ASA
85) AAS
86) 36°
87) SSS $\Delta CEF \cong \Delta DFE$
88) SAS $\Delta QTS \cong \Delta RTA$
89) I: If a polygon does not have 8 sides then it is not an octagon.
C: If a polygon is not an octagon, then it does not have 8 sides.
90) I: If it is not a leap year, then it is not an even numbered year.
C: If it is not an even numbered year, then it is not a leap year.
91) I: If it is not snowing, then it is summer.
C: If it is summer, then it is not snowing.
92) $-\frac{3}{2}$
93) undefined
94)

1. $\overline{AT} \cong \overline{GS}; \overline{AT} \parallel \overline{GS}$	1. Given
2. $\overline{GT} \cong \overline{GT}$	2. Reflexive prop of $\cong$
3. $\angle ATG \cong \angle TGS$	3. if // cut by trans, then alt int <s $\cong$
4. $\Delta GAT \cong \Delta TSG$	4. SAS

95)

1. $\overline{LN}$ bis $\angle OLM$ and $\angle ONM$	1. Given
2. $\angle OLN \cong \angle NLM$, $\angle ONL \cong \angle MNL$	2. < bis cut <s into two $\cong$ parts
3. $\overline{LN} \cong \overline{LN}$	3. Reflexive prop $\cong$
4. $\Delta OLN \cong \Delta MLN$	4. ASA

96)

1. $\overline{AD}$ bis $\overline{BE}; \overline{AB} \parallel \overline{DE}$	1. Given
2. $\overline{EC} \cong \overline{BC}$	2. Definition of bisect
3. $\angle E \cong \angle B$	3. If // cut by a trans, then alt int angles $\cong$
4. $\angle ACB \cong \angle DCE$	4. vertical angles $\cong$
5. $\Delta ABC \cong \Delta DEC$	5. ASA

97)

1. $n \parallel p; l \parallel m$	1. given
2. $\angle 1 \cong \angle 2$	2. if // cut by a trans, then alt ext angles $\cong$
3. $\angle 2 \cong \angle 4$	3. if // cut by a trans, then corrs angles $\cong$
4. $\angle 1 \cong \angle 4$	4. Transitive prop $\cong$

98) 1. $\overline{PR} \perp \overline{QS}; \angle Q \cong \angle S$ — 1. given
2. $\angle 1 \text{ and } \angle 2 \text{ are right angles}$ — 2. definition of perpendicular
3. $\angle 1 \cong \angle 2$ — 3. All right angles congruent
4. $\overline{PR} \cong \overline{PR}$ — 4. Reflexive prop $\cong$
5. $\Delta PRQ \cong \Delta PRS$ — 5. AAS
6. $\overline{RQ} \cong \overline{RS}$ — 6. CPCTC

99) 1. $\overline{MO} \cong \overline{PO}; \overline{NO} \text{bis} \overline{MP}$ — 1. given
2. $\angle M \cong \angle P$ — 2. if Δ, then Δ
3. $\overline{MN} \cong \overline{PN}$ — 3. definition of bisect
4. $\Delta MNO \cong \Delta PNO$ — 4. SAS

100) B
101) A

102) $-\frac{5}{6}$
103) 2
104) undefined
105) 0
106) $\frac{-7}{10}$
107) $\frac{1}{13}$