Geometry 1.0 Errata
October 15, 2012

Geometry Errors on Current Printing

- **Lesson 23 #12:** Answer key should say "if two angles are complementary to the same angle they are congruent." The solution should say this as well.
- **Lesson 29 pg. 180, para 2, line 2**. Change "An isosceles triangle has two sides equal" to "An isosceles triangle has at least two sides equal"
- **Lesson 29 pg. 180, figure on the left**. Change the sentence under the picture "Isosceles triangle: two sides equal" to "Isosceles triangle: at least two sides equal"
- **Lesson 29 #2 pg. 183**. Change "An isosceles triangle has three congruent sides" to "All isosceles triangles have three congruent sides"
- **Lesson 29 #22 pg. 185**. Change "If a triangle is isosceles, then it has two equal sides" to "If a triangle is isosceles, then it has at least two equal sides"
- **Answer key Lesson 29 #22 pg. 22**. Change "If a triangle has two equal sides, then it is isosceles; True" to "If a triangle has at least two equal sides, then it is isosceles; True"
- **Lesson 30 #6 pg. 190**. Change "A(n) _____ triangle has two congruent (equal) sides" to "A(n) _____ triangle has at least two congruent (equal) sides"
- **Chapter 5 Test#4 pg. 117**. Change "A(n) _____ triangle has two congruent (equal) sides" to "A(n) _____ triangle has at least two congruent (equal) sides"
- **Lesson 69# E and 24 pg. 447 and 450**. Practice E and problem 24 need to be moved into Problem Set 70 because we need to use the Converse of Definition of Similar Triangle which is introduced in Lesson 70.
- **Lesson 70 pg. 451, last paragraph, third line**. We should highlight the definition of similar triangles and change the definition to "if two triangles have their corresponding angles congruent and their corresponding sides in proportion, then they are similar."
- **Lesson 74 #25 p. 488**. The proof can be done in just one step using Theorem 33: The diagonals of an isosceles trapezoid are congruent (equal).

Errors that occurred in old printings. None of these are in new textbooks or CDs sold after October 15, 2012.

- **Lesson 2 #14:** Answer should say "XMQ" instead of "SMQ"
- **Lesson 7 #4:** Answer should be "straight line"
- **Lesson 18 #20:** The workbook gives the measurement $KM=5z-10$ where it should be $VM=5z-10$.
- **Lesson 22 #15:** Answer should be "always"

- **Lesson 22 #24:** Step 3 should be
    - **(3)** $\angle 1 \cong \angle 3,\ \angle 2 \cong \angle 4.$
- **Lesson 23, Practice b**: Answer should be "Subtraction property; Substitution Property"
- **Lesson 23 #7:** Answer should be "Supplementary angles; alternate interior angles"
- **Lesson 23 #12:** Answer should be "Subtraction Property; Substitution Property"
- **Lesson 24 Lecture pg. 147:** Step 6 of the proof says that $\angle 1$ and $\angle 2$ are supplementary. It should say $\angle 2$ and $\angle 3$.
- **Lesson 24 #22:** Angle 2 should be on the other side of line segment *WV*.
- **Lesson 25 #9:** Answer should be "Transitive or Substitution Property"
- **Lesson 28, Practice c:** Answer should be "Interior angles on the same side of the transversal; supplementary"
- **Lesson 28 #15:** Answer should be "sometimes"
- **Lesson 28 #18:** Answer should be "Alternate interior angles; congruent"
- **Lesson 28 #19:** Answer should be "Interior angles on the same side of the transversal; supplementary"
- **Lesson 29 #24:** Angle 3 should be on the other side of line r.
- **Lesson 29 #22:** Answer should be "If a triangle has two equal sides; then it is isosceles; True"
- **Lesson 30 #9:** Answer should be "never"
- **Lesson 33 #23:** Proof should be:
    - **(1)** $\angle BAD \cong \angle ADC$; E is the midpoint of $\overline{AD}$; $\overline{AB} \cong \overline{CD}$ (Given)
    - **(2)** $\overline{AE} \cong \overline{ED}$ (Definition of midpoint)
    - **(3)** $\Delta ABE \cong \Delta DCE$ (S.A.S.)
- **Lesson 34, Practice e:** Should say Prove: $\Delta HDF \cong \Delta PFD$
- **Lesson 36, Practice d:** Answer should be "$m\angle M = 29,\ m\angle MRE = 61$"
- **Lesson 36 #20:** Answer should be "$m\angle P = 35,\ m\angle PQC = 55$**"**
- **Chapter 5 Test #15:** Answer should be "$70°,\ 50°, 60°$"
- **Lesson 38, Practice b:** Answer should be "Corresponding Parts of Congruent Triangles are Congruent (C.P.C.T.C.)**"**
- **Lesson 38 #15:** Answer should be "Corresponding Parts of Congruent Triangles are Congruent (C.P.C.T.C.)"
- **Lesson 38 #16:** Answer should be "Corresponding Parts of Congruent Triangles are Congruent (C.P.C.T.C.)"
- **Lesson 40 #19:** Answer should be "x=14, y=19"
- **Lesson 42, Practice e:** Step 7 should be:
    (7) $\Delta NMO \cong \Delta KLQ$ (A.A.S.)

- **Lesson 42 #21:** Answer should be:

- **Lesson 43 #24**: Steps 8 and 9 should be:
  (8) $\overline{DS} \cong \overline{LS}$ (C.P.C.T.C.)
  (9) ΔDSL is isosceles (Definition of an isosceles triangle)
- **Chapter 6 Test #19:** Answer should be "$22.5°$"
- **Lesson 44 #5:** Answer should be "$a + c > b + d$; Addition Property of Inequality"
- **Lesson 44 #10, 11:** Should say "Solve each inequality below. Show your steps and give a reason for each one."
- **Lesson 46, Practice c:** Answer should be "y=72"

- **Lesson 48 #23:** Problem and answer should be:
  Given: G is between H and E
  Prove: $m\angle HGD > m\angle F$

  Answer:
  (1) G is between H and E (Given)
  (2) $m\angle HGD > m\angle GED$ (Exterior Angle Inequality Theorem)
  (3) $m\angle GED > m\angle F$ (Exterior Angle Inequality Theorem)
  (4) $m\angle HGD > m\angle F$ (Transitive)
- **Chapter 7 Test #18:** Answer should be "$\angle I$"
- **Lesson 51 #23 pg 326:** Add "$AP \neq$ PC and $PC \neq AC$" to the given
- **Lesson 52 #18:** Answer should be "$45°, 60°, 75°$; acute triangle"
- **Lesson 54, Practice c**: Answer should be "If both pairs of opposite sides are congruent, then a quadrilateral is a parallelogram"
- **Lesson 54 #16:** Answer should be "If both pairs of opposite sides are congruent, then a quadrilateral is a parallelogram (definition of parallelogram)"
- **Lesson 58 #21:** Answer should be "$p = 23,\ q = 18$"
- **Lesson 63 #6:** Answer should be "Regular pentagon, $108°$**"**
- **Lesson 63 #7:** Answer should be "Equilateral triangle, $60°$**"**
- **Lesson 64, Practice c:** Answer should be "y=19"
- **Lesson 64 #19:** Answer should be "$x = 60,\ y = 20,\ z = 30$**"**
- **Lesson 66 pg. 425:** Arkansas is incorrectly labeled as Louisiana.
- **Lesson 66 pg. 425:** Arkansas is incorrectly labeled as Louisiana.
- **Lesson 67 #6:** Answer should be "Regular pentagon, $108°$"
- **Lesson 67 #7:** Answer should be "Regular hexagon, $120°$"
- **Lesson 67 #15:** Answer should be "$y = \frac{m}{3}$**"**
- **Lesson 68, Practice e:** Steps 3 and 4 should be:
  (3) $\angle AKC$ and $\angle CJA$ are right angles (Perpendicular lines intersect to form right angles.)
  (4) $\angle AKC \cong \angle CJA$ (All right angles are congruent.)
- **Lesson 73, Practice d:** Answer should be "8.66"
- **Lesson 73 #6:** Answer should be "Regular octagon; $135°$"

- **Lesson 73 #7:** Answer should be "Regular decagon; 144°"
- **Lesson 73 #22:** Answer should be "10.39"
- **Lesson 73 #23:** Step 5 should be:
  (5) $DA > PA$ (If Unequal Angles, then Unequal Sides)

- **Lesson 74, Practice a:** Answer should be "13.44"
- **Lesson 74 #7:** Answer should be "7.95"
- **Lesson 75 #22:** Answer should be "48.16"
- **Answer key Lesson 78 #23 pg 69:** Change step 4 to "$\angle PSR \cong \angle T$ (Converse of definition of similar triangles."
- **Chapter 10 Test #14:** The arcs on the angles should be erased except for the angle opposite the longest side of each triangle.
- **Chapter 11 Test #13:** Answer should be "17.30" since the instructions say to round any irrational answer to two decimal places.
- **Chapter 11 Test #23:** The following step should be inserted between steps 4 and 5 of the proof: $\angle CEF \cong \angle HDI$ (Converse of Definition of Similar Triangles)
- **Lesson 80 #20:** Answer should be "16.30"
- **Lesson 82 #20:** Answer should be "$y = 5\sqrt{7}$"
- **Lesson 83 Practice E pg 551:** Change the instruction to "Do the proof below informally and use the indirect method."
- **Lesson 83, Practice e:** Answer should be "$\overline{KL} \perp \overleftrightarrow{LW}$ at point L (Given). Assume $\overleftrightarrow{LW}$ is not a tangent to $\odot K$. That means it must intersect $\odot K$ at another point, W. Since $\overline{KW}$ is the hypotenuse of ΔKLW, $KW > KL$. But if W is on the circle, KW should be a radius and equal to KL. The assumption that $\overleftrightarrow{LW}$ is not a tangent must be false. Therefore, $\overleftrightarrow{LW}$ has to be a tangent"
- **Lesson 83 #24:** Step 3 should be:
  (3) $\overline{PC} \perp \overleftrightarrow{DC}$ (Definition of perpendicular lines)
- **Lesson 83 #25 pg 554:** Change the instruction to "Do each proof below. Number 25 is Theorem 65. Do an informal proof for problem 25 and use the indirect method."
- **Lesson 83 #25:** Answer should be "$\overline{OP} \perp \overleftrightarrow{RP}$ at point P (Given). Assume $\overleftrightarrow{RP}$ is not a tangent to $\odot O$. That means it must intersect $\odot O$ at another point, R. Since $\overline{OR}$ is the hypotenuse of ΔOPR, $OR > OP$. But if R is on the circle, OR should be a radius and equal to OP. The assumption that $\overleftrightarrow{RP}$ is not a tangent must be false. Therefore, $\overleftrightarrow{RP}$ has to be a tangent"
- **Lesson 84 #6:** Answer should be "Regular pentagon; 108º"
- **Lesson 84 #13:** Answer should be "base = 18.88, legs = 16.89"
- **Lesson 84 #23:** Step 6 should be:
  (6) $\angle 1 \cong \angle 2$ (If two parallel lines are cut by a transversal, then their alternate interior angles are congruent.)
- **Lesson 89, Practice d:** Answer should be "$DE = 6$"

- **Lesson 91 #7:** Answer should be "75.10"
- **Lesson 94 #23:** Step 5 should be:

  (5) $\overset{\frown}{QSP}$ is a semicircle.
- **Lesson 96 #16:** Answer should be "$14+6\pi$**"**
- **Chapter 14 Test #8:** Answer should be "$6\pi-9\sqrt{3}$**"**
- **Lesson 101 #22:** Answer should be "30.94 in"
- **Problem Set 102 #24:** Steps 4 and 5 should be changed to:
  - **(4)** $m\angle RTS=\frac{1}{2}m\overset{\frown}{RS}$, $m\angle TSU=\frac{1}{2}m\overset{\frown}{TU}$ (An inscribed angle is equal in measure to one-half the measure of its intercepted arc.)
  - **(5)** $\frac{1}{2}m\overset{\frown}{RS}=\frac{1}{2}m\overset{\frown}{TU}$ (Substitution)
  - **(6)** $m\overset{\frown}{RS}=m\overset{\frown}{TU}$ (Multiplication)
  - Then the original steps 6-11 should be renumbered 7-12.
- **Answer key Lesson 51 #23 pg 43:** Add "$AP \neq$ PC and $PC \neq AC$" to step 1 of the proof