

3rd Quarter Exam –Geometry –Easy Peasy All-in-One High School

Section 7.2

24. 31
25. $x=20, y=7$

Section 7.5

11. yes
15. $x=9$

Section 7.6

1. (2, 6)

Section 8.2

22. See the following table:

TABLE 8.1:

<i>Statement</i>	<i>Reason</i>
1. In $\triangle ABC, a^2 + b^2 < c^2$, and c is the longest side. In $\triangle LMN, \angle N$ is a right angle.	Given
2. $a^2 + b^2 = h^2$	Pythagorean Theorem
3. $c^2 > h^2$	Transitive PoE
4. $c > h$	Take the square root of both sides
5. $\angle C$ is the largest angle in $\triangle ABC$.	The largest angle is opposite the longest side.
6. $m\angle N = 90^\circ$	Definition of a right angle
7. $m\angle C > m\angle N$	SSS Inequality Theorem
8. $m\angle C > 90^\circ$	Transitive PoE
9. $\angle C$ is an obtuse angle.	Definition of an obtuse angle.
10. $\triangle ABC$ is an obtuse triangle.	Definition of an obtuse triangle.

Section 8.4

1. $x\sqrt{2}$
2. $x\sqrt{3}, 2x$
3. $15\sqrt{2}$
4. $11\sqrt{2}$
5. 8
6. $90\sqrt{2}$ or 127.3 ft.

Section 8.5

14. $\sin A = \frac{4}{5}, \cos A = \frac{3}{5}, \tan A = \frac{4}{3}$

Section 8.6

17. 47.6°

Section 9.1

1. diameter
2. secant
3. chord

4. point of tangency
5. common external tangent
6. common internal tangent
7. center
8. radius
9. the diameter

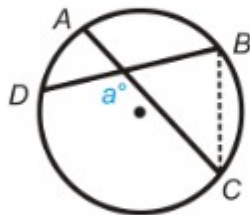
Section 9.5

31. See the following table:

TABLE 9.4:

Statement

1. Intersecting chords \overline{AC} and \overline{BD} .
2. Draw \overline{BC}



Reason

- Given
- Construction

3. $m\angle DBC = \frac{1}{2}m\widehat{DC}$

Inscribed Angle Theorem

4. $m\angle ACB = \frac{1}{2}m\widehat{AB}$

Inscribed Angle Theorem

5. $m\angle a = m\angle DBC + m\angle ACB$

Exterior Angle Theorem

6. $m\angle a = \frac{1}{2}m\widehat{DC} + \frac{1}{2}m\widehat{AB}$

Substitution
