

Geometry – Chapter 5 Review

Use your notes to help you if you get stuck on any sections.

5.0 – Simplify Radical Expressions

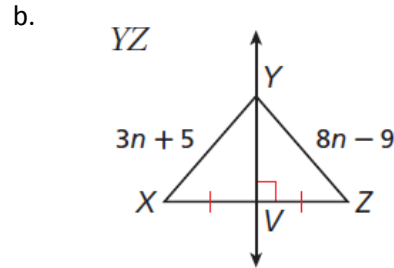
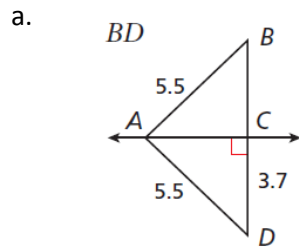
1. Write each expression in simplified radical form.

a. $\sqrt{121x^2}$ b. $5\sqrt{80}$ c. $\sqrt{63}$ d. $\sqrt{98}$

e. $\sqrt{49x^2}$ f. $\sqrt{48x^2}$ g. $2\sqrt{75}$ h. $\sqrt{21}$

5.1 – Properties of Bisectors

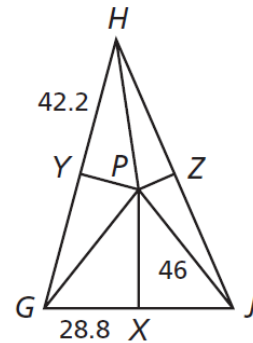
2. Find each measure.



5.2 – Bisectors of Triangles

3. \overline{PX} , \overline{PY} , \overline{PZ} are the perpendicular bisectors of $\triangle GHJ$.

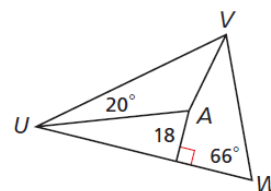
- a. Find GY b. Find GP
- c. Find GJ d. Find PH



4. \overline{UA} and \overline{VA} are angle bisectors of $\triangle UVW$.

a. Find the distance from A to \overline{UV}

b. Find the measure of angle AUW



c. Find the measure of angle UVA

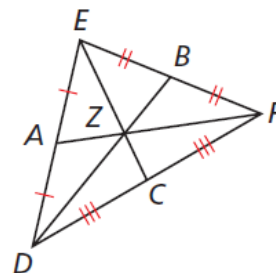
d. Find the distance from A to \overline{VW}

5.3 – Medians and Altitudes

5. In $\triangle DEF$, $DB = 24.6$ and $EZ = 11.6$. Find each length.

a. DZ

b. ZB



c. ZC

d. EC

5.4 – Triangle Midsegments

6. Find each measure.

a. BC

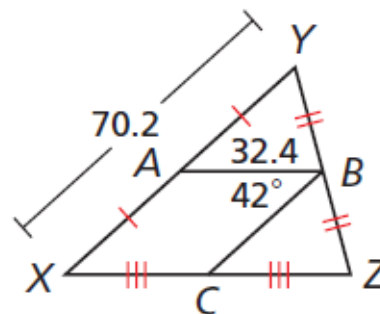
b. XZ

c. XC

d. $m\angle BCZ$

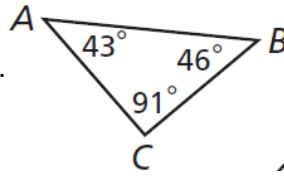
e. $m\angle BAX$

f. $m\angle YXZ$

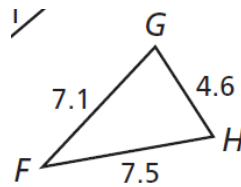


5.5-5.6 – Inequalities in Triangles

7. List the sides in order from shortest to longest.

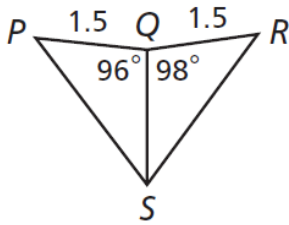


8. List the angles in order from smallest to largest.

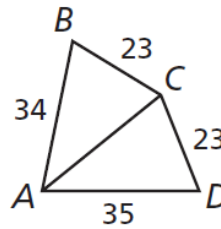


9. Compare the given measures.

a. PS and RS



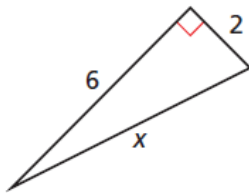
b. $m\angle BCA$ and $m\angle DCA$



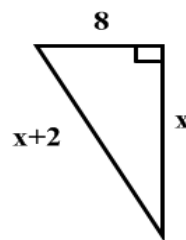
5.7 – Pythagorean Theorem

10. Find the value of x. Give your answer in simplest radical form.

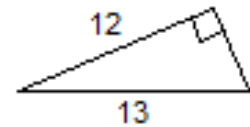
a.



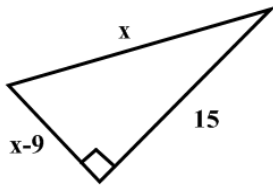
b.



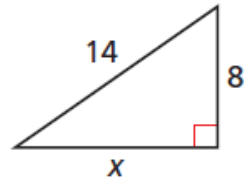
c.



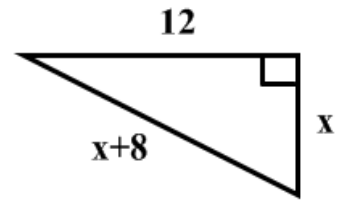
d.



e.



f.



11. Tell if the measures can be the side lengths of a triangle. If so, classify the triangle as acute, obtuse, or right.

a. 9, 12, 16

b. 11, 14, 27

c. 7, 9, 11

d. 8, 15, 17

Matching: Each choice may be used more than once.

1. _____ Equidistant from the sides of a triangle.
2. _____ where the altitudes of a triangle meet
3. _____ where the angle bisectors of a triangle meet
4. _____ two-thirds of the length from each vertex
5. _____ equidistant from the vertices of a triangle
6. _____ point where the medians of a triangle meet
7. _____ point where the perpendicular bisectors of a triangle meet

- A. Circumcenter
- B. Orthocenter
- C. Centroid
- D. Incenter