



# ASSESSMENT

Multiple Choice: Read and analyze the following problems and choose the letter of the correct answer.

1. \_\_\_\_\_ are triangles with congruent corresponding angles and proportional corresponding sides.

- a. Regular triangles
- b. Acute Triangles
- c. Congruent triangles
- d. Similar Triangles

2. Which of the following triangles will always be similar?

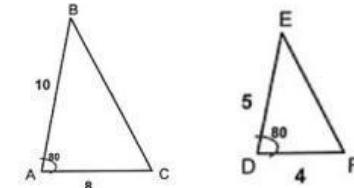
- a. Two acute triangle
- b. Two equiangular triangle
- c. two obtuse triangle
- d. none

3. What triangle similarity is this, "Two triangles are similar if the corresponding sides of two triangles are in proportion".

- a. SAS similarity theorem
- b. AA similarity theorem
- c. SSS similarity theorem
- d. No similarity

4. Using the figure at the right,  $\frac{AB}{DE} = \frac{AC}{DF}$ ;  $\angle A \cong \angle D$ , then what similarity theorem will show that  $\Delta ABC \sim \Delta DEF$ ?

- a. SAS similarity
- b. AA similarity
- c. SSS similarity
- d. No similarity



5. If the two angles of one triangle are congruent to the two angles of another triangle, then the two triangles are similar

by \_\_\_\_\_.

- a. SAS similarity theorem
- b. AA similarity theorem
- c. SSS similarity theorem
- d. No similarity

**For items 6-8.** Refer to the figure on the right.

6. Given that  $\Delta PQR \sim \Delta STR$ , which of the following is the correct proportion?

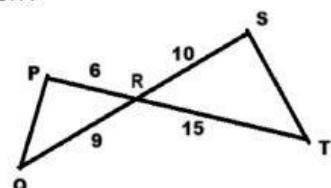
- a.  $\frac{PR}{RS} = \frac{RQ}{RT}$
- b.  $\frac{PQ}{RS} = \frac{RQ}{ST}$
- c.  $\frac{PR}{RQ} = \frac{RT}{RS}$
- d.  $\frac{PR}{RT} = \frac{RQ}{RS}$

7. Using the figure at the right, do  $\Delta PQR$  and  $\Delta STR$  be similar?

- a. similar by SAS
- b. similar by SSS
- c. similar by AA
- d. Not similar

8. If  $\Delta PQR \sim \Delta STR$ , then which of the following could NOT be TRUE?

- a.  $\angle Q \cong \angle S$
- b.  $\angle R \cong \angle R$
- c.  $\angle P \cong \angle T$
- d.  $\angle Q \cong \angle R$



**For items 9-10.** Refer to triangle ABC at the right.

9. Which of the following could be the length of altitude RW or a?

- a.  $7\sqrt{4}$
- b.  $2\sqrt{7}$
- c.  $7\sqrt{2}$
- d.  $4\sqrt{7}$

10. Which of the following could be the length of OR?

- a.  $11\sqrt{4}$
- b.  $2\sqrt{11}$
- c.  $11\sqrt{2}$
- d.  $4\sqrt{11}$

