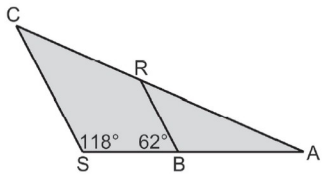
Name:_____
Date Started: _____Date Completed: _____Score:_____

Learning Activity Sheet
Proving Similarity of Triangles and Pythagorean Theorem

Write the letter of the correct answer on the space provided before the number.

For items 1–5, refer to the figure below.



____1. Which of the following angle corresponds to ∠ ARB?
A. ∠ ACS B. ∠ ABR C. ∠ ASC D. ∠ RBS

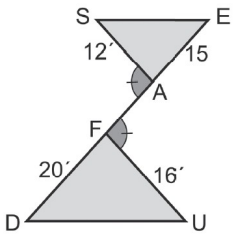
____2. Which of the following angle corresponds to ∠ ASC?
A. ∠ACS B. ∠RBA C. ∠CRB D. ∠RBS

____3. Which of the following statements is TRUE? State the reason to support your answer.
A. m∠ A = 62, CPCTC
B. m∠ RBA = 56, AAA Similarity
C. m∠ RBA = 118, Linear pair
D. m∠ RBA = 112, Pythagorean Theorem

____4. Which of the following statement is FALSE?
A. $\frac{CS}{BR}=\frac{CA}{RA}$ B. $\frac{RA}{AC}=\frac{RB}{CS}$ C. $\frac{AB}{AS}=\frac{AR}{AC}$ D. $\frac{AB}{AS}=\frac{RC}{SB}$

____5. Which of the following statement is FALSE?
A. ΔABR ~□ASC C. ΔARB ~□ASC
B. ΔARB ~□ACS D. ΔBAR ~□SAC

For items 6–9, consider the figure below.



____6. Which of the following angle corresponds to ∠ UDF?
A. ∠ESA B. ∠AES C. ∠FDU D. ∠RBS

____7. Which of the following angle corresponds to ∠ AES ?
A. ∠FDU B. ∠FUB C. ∠SAE D. ∠UFD

____8. Which of the following is TRUE?

A. $\frac{UD}{UF} = \frac{AS}{AE}$, corresponding sides are proportional

B. $\frac{SE}{UF} = \frac{SA}{UD}$, corresponding sides are proportional

C. $\frac{AS}{AE} = \frac{FU}{FD}$, corresponding sides are proportional

D. $\frac{ES}{EA} = \frac{AC}{AR}$, corresponding sides are proportional

____9. Which of the following is FALSE?

A. ΔSEA ~ΔUDF
B. ΔSEA ~ΔUFD
C. ΔEAS ~ΔDFU
D. ΔASE ~ΔFUD

____10. Which of the following are NOT the lengths of the sides of similar triangles?

A. 1, 2, 3 and 2, 4, 6
B. 3, 4, 5 and 5, 6, 7
C. 3, 4, 5 and 5,12, 13
D. 6, 8, 10 and 5, 12, 13