Multiple Choice: *Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.*

1. "If two sides of one triangle are congruent to two sides of another triangle, but the included angle of the first triangle is greater than the included angle of the second, then the third side of the first triangle is longer than the third side of the second." This is stated in:

   A. Converse of Hinge Theorem

   B. Exterior Angle Inequality Theorem

   C. Hinge Theorem

   D. Triangle Inequality Theorem

2. The converse of Hinge Theorem is also called:

   A. SAS Inequality Theorem

   B. ASA Inequality Theorem

   C. AAS Inequality Theorem

   D. SSS Inequality Theorem

3. The measures of the two angles of $\triangle ABC$ are $m\angle A = 20°$ and $m\angle B = 103°$. What is the measure of $\angle C$?

   A. $37°$ B. $43°$ C. $54°$ D. $57°$

4. The lengths of the sides of $\triangle ABC$ are $AB = 15, BC = 8$, and $AC = 12$. What is the largest angle?

   A. $\angle A$ B. $\angle B$ C. $\angle C$ D. $\angle ABC$

5. The measures of two sides of a triangle are 8 and 11. Between what two numbers must the length of the third side fall?
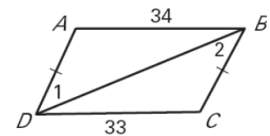
   A. 2 and 17   B. 3 and 19   C. 7 and 12   D. 9 and 10

6. The measures of the two angles of $\triangle ABC$ are $m\angle A = 20°$ and $m\angle B = 103°$. What is the shortest side?

   A. $\overline{AB}$ B. $\overline{BC}$ C. $\overline{AC}$ D. $\overline{BA}$
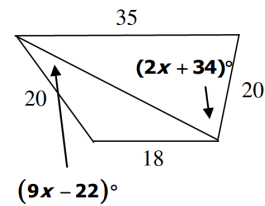
7. Which of the following statements is true?

   A. $AB > CD$ B. $AB = CD$ C. $m\angle 1 < m\angle 2$ D. $m\angle 1 > m\angle 2$
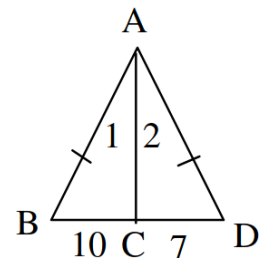
8. Based on the figure, write an inequality or pair of inequalities to describe the possible values of x.

   A. $x < 8$ B. $x > 8$ C. $x < -8$ D. $x > -8$
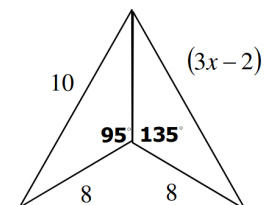
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10. Based on the figure, write an inequality or pair of inequalities to describe the possible values of x.

   A. $x < 4$ B. $x > 4$ C. $x < -4$ D. $x > -4$

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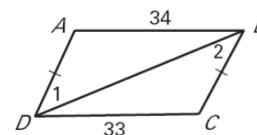
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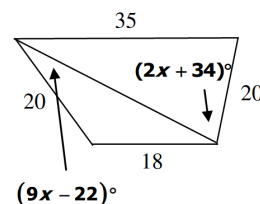
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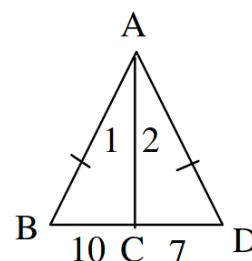
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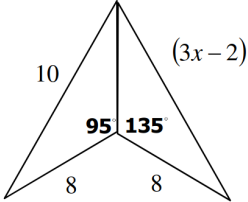
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