Chapter 3: Triangles / Polygons
 name

 Lesson 3-3: Triangle Inequalities
 date

 Homework
 period

For each set of lengths, determine whether it is possible to draw a triangle with sides of the given measures. If possible, write yes. If not possible, write no.

1. 3, 4, 5	2. 4, 9, 5	3. 5, 6, 12
4. 7, 3.5, 4.5	5. 4, 5, 8.5	65, 1.2, .6

The lengths of two sides of a triangle are given. Find the two numbers that the third side must fall between.

 7. 3 and 8

 8. 12 and 25

9. 13 and 4 _____ < x < ____ 10. 13 and 21 _____ < x < ____

Arrange the letters in order from greatest to least.



15. __ > __ >



16. What conclusion can we draw from this triangle?



For questions 17 - 20 refer to the diagram below.



- 17. What is the longest segment in $\triangle CED$?_____
- 18. Find the longest segment in $\triangle ABE$._____
- 19. Find the longest segment in the figure._____
- 20. What is the shortest segment in BCDE?_____