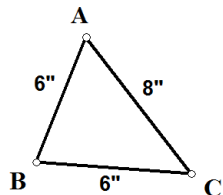


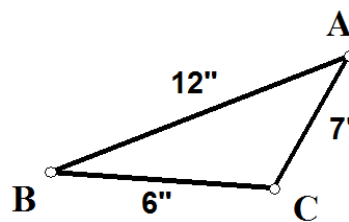
### TRIANGLE INEQUALITIES

LIST THE ANGLES IN ORDER FROM SMALLEST TO LARGEST.

- 1) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

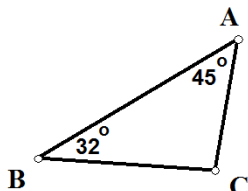


- 2) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

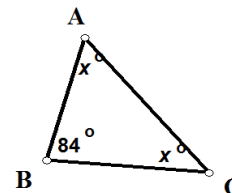


NAME THE SIDES IN ORDER FROM SHORTEST TO LONGEST.

- 3) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



- 4) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



FIND THE VALUE OF X AND LIST THE SIDES OF  $\triangle ABC$  IN ORDER FROM SHORTEST TO LONGEST IF THE ANGLES HAVE THE INDICATED MEASURES.

5)  $m\angle A = 9x + 29$ ,  $m\angle B = 93 - 5x$ ,  $m\angle C = 10x + 2$ ;  $x =$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

6)  $m\angle A = 9x - 4$ ,  $m\angle B = 4x - 16$ ,  $m\angle C = 68 - 2x$ ;  $x =$  \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

DETERMINE WHETHER IT IS POSSIBLE TO DRAW A TRIANGLE WITH SIDES OF THE GIVEN MEASURES. WRITE YES OR NO.

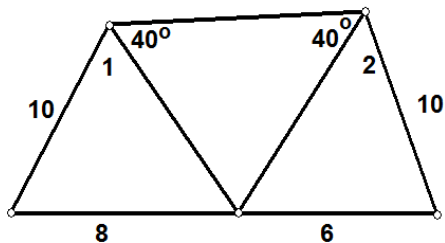
- 7) 5, 4, 3 \_\_\_\_\_      8) 301, 8, 310 \_\_\_\_\_      9) 12, 2.2, 14.3 \_\_\_\_\_

THE MEASURES OF TWO SIDES OF A TRIANGLE ARE GIVEN. BETWEEN WHAT TWO NUMBERS MUST THE MEASURE OF THE THIRD SIDE FALL?

- 10) 15 and 18 \_\_\_\_\_ & \_\_\_\_\_      11) 64 and 88 \_\_\_\_\_ & \_\_\_\_\_

REFER TO EACH FIGURE AND CHOOSE =, < OR > TO RELATE THE GIVEN PAIR OF ANGLE OR SEGMENT MEASURES.

12)  $m\angle 1$  \_\_\_\_\_  $m\angle 2$



13)  $TM$  \_\_\_\_\_  $RS$

