Name : _____ Score : _____

Teacher : _____ Date : _____

Triangle Inequality Theorem

State if each set of three numbers can be the lengths of the sides of a triangle.

1) 11, 4, 10

2) 10, 3, 18

3) 7, 3, 8

4) 13, 7, 21

5) 4, 5, 11

6) 8, 4, 7

7) 3, 5, 3

8) 11, 13, 28

9) 10, 7, 8

10) 4, 2, 7

Given are the lengths of two sides of a triangle. Find the range of lengths for the third side.

11) 10, 9

12) 4, 11

13) 5, 12

14) 6, 5

15) 10, 8

16) 3, 9

Name : _____ Score : _____

Teacher : _____ Date : _____

Triangle Inequality Theorem

State if each set of three numbers can be the lengths of the sides of a triangle.

1) 11, 4, 10

Yes

2) 10, 3, 18

No

3) 7, 3, 8

Yes

4) 13, 7, 21

No

5) 4, 5, 11

No

6) 8, 4, 7

Yes

7) 3, 5, 3

Yes

8) 11, 13, 28

No

9) 10, 7, 8

Yes

10) 4, 2, 7

No

Given are the lengths of two sides of a triangle. Find the range of lengths for the third side.

11) 10, 9

$1 < x < 19$

12) 4, 11

$7 < x < 15$

13) 5, 12

$7 < x < 17$

14) 6, 5

$1 < x < 11$

15) 10, 8

$2 < x < 18$

16) 3, 9

$6 < x < 12$