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) 2, 5, 12

2) 10, 13, 18

3) 11, 10, 22

4) 11, 8, 6

5) 10, 12, 27

6) 12, 9, 23

7) 7, 13, 24

8) 13, 6, 24

9) 9, 11, 25

10) 5, 7, 14

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

11) 13, 11

12) 5, 13

13) 12, 10

14) 10, 8

15) 5, 4

16) 7, 10

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) 2, 5, 12

No

2) 10, 13, 18

Yes

3) 11, 10, 22

No

4) 11, 8, 6

Yes

5) 10, 12, 27

No

6) 12, 9, 23

No

7) 7, 13, 24

No

8) 13, 6, 24

No

9) 9, 11, 25

No

10) 5, 7, 14

No

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

11) 13, 11

$2 < x < 24$

12) 5, 13

$8 < x < 18$

13) 12, 10

$2 < x < 22$

14) 10, 8

$2 < x < 18$

15) 5, 4

$1 < x < 9$

16) 7, 10

$3 < x < 17$