



# Triangle Inequality Theorem

Math

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

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

12.8, 21.9, 47.2

25, 12, 31

13, 13, 35

3.6, 4.3, 15.9

7.4, 6.3, 8.1

7, 20, 33



## PREVIEW

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22.4, 15.8

22, 12

9, 9

15.9, 6.4

23, 11

15.7, 14.9



# Triangle Inequality Theorem - Answer Key

Math

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

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

12.8, 21.9, 47.2

No

25, 12, 31

Yes

13, 13, 35

No

3.6, 4.3, 15.9

No

7.4, 6.3, 8.1

Yes

7, 20, 33

No



## PREVIEW

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$$11 < x < 39$$

$$9.7 < x < 31.7$$

$$1 < x < 7$$

22.4, 15.8

22, 12

9, 9

$$6.6 < x < 38.2$$

$$10 < x < 34$$

$$0 < x < 18$$

15.9, 6.4

23, 11

15.7, 14.9

$$9.5 < x < 22.3$$

$$12 < x < 34$$

$$0.8 < x < 30.6$$