



Triangle Inequality - Range

Name _____

Score _____

TI:11

Let x be the third side of a triangle. Find the range of x from the given other two side lengths of a triangle.

Q.No	Side 1	Side 2	Range of the third side (x)
1)	15 mm	7 mm	
2)	4 m	9 m	
3)	21 cm	23 cm	
4)	19 m	12 m	
5)	5 mm	11 mm	
6)	16 cm	8 cm	
7)	26 m	10 m	

Let x be the third side of a triangle. Find the range of x , the least and greatest possible measure of the third side from the given other two side lengths of a triangle.

1) 6 cm, 10 cm

Range :

Least :

Greatest :

2) 17 mm, 24 mm

Range :

Least :

Greatest :



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Answer key

TI:11

Let x be the third side of a triangle. Find the range of x from the given other two side lengths of a triangle.

Q.No	Side 1	Side 2	Range of the third side (x)
1)	15 mm	7 mm	$8 \text{ mm} < x < 22 \text{ mm}$
2)	4 m	9 m	$5 \text{ m} < x < 13 \text{ mm}$
3)	21 cm	23 cm	$2 \text{ cm} < x < 44 \text{ cm}$
4)	19 m	12 m	$7 \text{ m} < x < 31 \text{ m}$
5)	5 mm	11 mm	$6 \text{ mm} < x < 16 \text{ mm}$
6)	16 cm	8 cm	$8 \text{ cm} < x < 24 \text{ cm}$
7)	26 m	10 m	$16 \text{ m} < x < 36 \text{ m}$

Let x be the third side of a triangle. Find the range of x , the least and greatest possible measure of the third side from the given other two side lengths of a triangle.

1) 6 cm, 10 cm

Range : **$4 \text{ cm} < x < 16 \text{ cm}$**

Least : **4 cm**

Greatest : **16 cm**

2) 17 mm, 24 mm

Range : **$7 \text{ mm} < x < 41 \text{ mm}$**

Least : **7 mm**

Greatest : **41 mm**