Triangle Inequality - Range

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)	6 m	15 m	
2)	27 cm	11 cm	
3)	5 mm	10 mm	
4)	2 cm	6 cm	
5)	13 m	18 m	
6)	11 mm	20 mm	
7)	12 cm	13 cm	

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)   18 mm, 12 mm

Range : _____

Least : _____

Greatest : _____

2)   1 m, 4 m

Range : _____

Least : _____

Greatest : _____

Triangle Inequality - Range

Answer key

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)	6 m	15 m	**9 m < x < 21 m**
2)	27 cm	11 cm	**16 cm < x < 38 cm**
3)	5 mm	10 mm	**5 mm < x < 15 mm**
4)	2 cm	6 cm	**4 cm < x < 8 cm**
5)	13 m	18 m	**5 m < x < 31 mm**
6)	11 mm	20 mm	**9 mm < x < 31 mm**
7)	12 cm	13 cm	**1 cm < x < 25 cm**

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)   18 mm, 12 mm

Range :   **6 mm < x < 30 mm**

Least :   **6 mm**

Greatest :   **30 mm**

2)   1 m, 4 m

Range :   **3 m < x < 5 m**

Least :   **3 m**

Greatest :   **5 m**