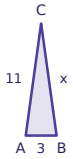
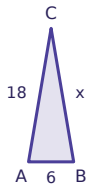
Triangle Inequality & Side–Angle Order · 1

Two sides of a triangle measure 3 and 11. Write the range of possible lengths x of the third side.



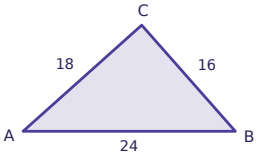
Triangle Inequality & Side–Angle Order · 2

Two sides of a triangle measure 6 and 18. The third side has a whole-number length. How many different lengths are possible?



Triangle Inequality & Side–Angle Order · 3

In △ABC, AB = 24, BC = 16 and AC = 18. Which angle is the largest? Answer A, B, or C.



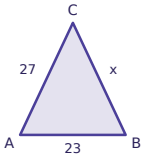
Triangle Inequality & Side–Angle Order · 4

In △ABC, m∠A = 91° and m∠B = 64°. Which side is the shortest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 5

Two sides of a triangle measure 23 and 27. Write the range of possible lengths x of the third side.

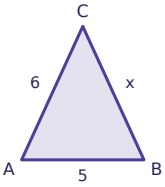


Triangle Inequality & Side–Angle Order · 6

Can the lengths 24, 6, 26 be the side lengths of a triangle? Answer yes or no.

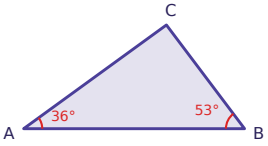
Triangle Inequality & Side–Angle Order · 7

Two sides of a triangle measure 5 and 6. The third side has a whole-number length. How many different lengths are possible?



Triangle Inequality & Side–Angle Order · 8

In △ABC, m∠A = 36° and m∠B = 53°. Which side is the shortest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 2

ANSWER

11

Triangle Inequality & Side–Angle Order · 1

ANSWER

8 < x < 14

Triangle Inequality & Side–Angle Order · 4

ANSWER

AB

Triangle Inequality & Side–Angle Order · 3

ANSWER

C

Triangle Inequality & Side–Angle Order · 6

ANSWER

yes

Triangle Inequality & Side–Angle Order · 5

ANSWER

4 < x < 50

Triangle Inequality & Side–Angle Order · 8

ANSWER

BC

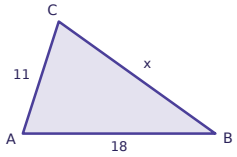
Triangle Inequality & Side–Angle Order · 7

ANSWER

9

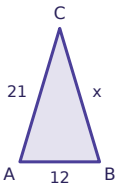
Triangle Inequality & Side–Angle Order · 9

Two sides of a triangle measure 18 and 11. Write the range of possible lengths x of the third side.



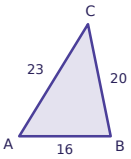
Triangle Inequality & Side–Angle Order · 10

Two sides of a triangle measure 12 and 21. The third side has a whole-number length. How many different lengths are possible?



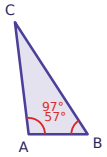
Triangle Inequality & Side–Angle Order · 11

In △ABC, AB = 16, BC = 20 and AC = 23. Which angle is the largest? Answer A, B, or C.



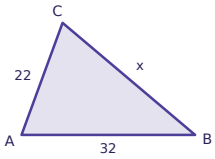
Triangle Inequality & Side–Angle Order · 12

In △ABC, m∠A = 97° and m∠B = 57°. Which side is the shortest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 13

Two sides of a triangle measure 32 and 22. Write the range of possible lengths x of the third side.

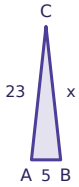


Triangle Inequality & Side–Angle Order · 14

Can the lengths 3, 6, 9 be the side lengths of a triangle? Answer yes or no.

Triangle Inequality & Side–Angle Order · 15

Two sides of a triangle measure 5 and 23. The third side has a whole-number length. How many different lengths are possible?



Triangle Inequality & Side–Angle Order · 16

In △ABC, m∠A = 58° and m∠B = 95°. Which side is the longest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 10

ANSWER

23

Triangle Inequality & Side–Angle Order · 9

ANSWER

7 < x < 29

Triangle Inequality & Side–Angle Order · 12

ANSWER

AB

Triangle Inequality & Side–Angle Order · 11

ANSWER

B

Triangle Inequality & Side–Angle Order · 14

ANSWER

no

Triangle Inequality & Side–Angle Order · 13

ANSWER

10 < x < 54

Triangle Inequality & Side–Angle Order · 16

ANSWER

AC

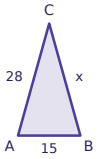
Triangle Inequality & Side–Angle Order · 15

ANSWER

9

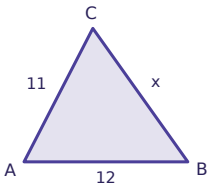
Triangle Inequality & Side–Angle Order · 17

Two sides of a triangle measure 15 and 28. Write the range of possible lengths x of the third side.



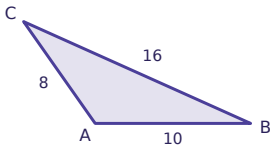
Triangle Inequality & Side–Angle Order · 18

Two sides of a triangle measure 12 and 11. The third side has a whole-number length. How many different lengths are possible?



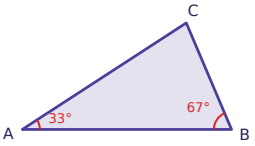
Triangle Inequality & Side–Angle Order · 19

In △ABC, AB = 10, BC = 16 and AC = 8. Which angle is the largest? Answer A, B, or C.



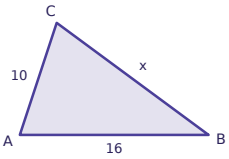
Triangle Inequality & Side–Angle Order · 20

In △ABC, m∠A = 33° and m∠B = 67°. Which side is the longest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 21

Two sides of a triangle measure 16 and 10. Write the range of possible lengths x of the third side.

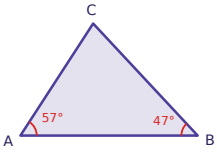


Triangle Inequality & Side–Angle Order · 22

Can the lengths 25, 35, 7 be the side lengths of a triangle? Answer yes or no.

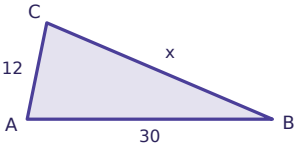
Triangle Inequality & Side–Angle Order · 23

In △ABC, m∠A = 57° and m∠B = 47°. Which side is the shortest? Answer AB, BC, or AC.



Triangle Inequality & Side–Angle Order · 24

Two sides of a triangle measure 30 and 12. Write the range of possible lengths x of the third side.



Triangle Inequality & Side–Angle Order · 18

ANSWER

21

Triangle Inequality & Side–Angle Order · 17

ANSWER

13 < x < 43

Triangle Inequality & Side–Angle Order · 20

ANSWER

AB

Triangle Inequality & Side–Angle Order · 19

ANSWER

A

Triangle Inequality & Side–Angle Order · 22

ANSWER

no

Triangle Inequality & Side–Angle Order · 21

ANSWER

6 < x < 26

Triangle Inequality & Side–Angle Order · 24

ANSWER

18 < x < 42

Triangle Inequality & Side–Angle Order · 23

ANSWER

AC