

3.3.2.14

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Question:

Two sides of a triangle are of length $5cm$ and $1.5cm$. The length of the third side of the triangle cannot be

- a. $3.6cm$
- b. $4.1cm$
- c. $3.8cm$
- d. $3.4cm$

Solution:

Symbol	Description
a	side of length $5cm$
b	side of length $1.5cm$
c	length of third side

TABLE 4: Variables Used

For any triangle the difference of length of two sides should not be greater than the third side.

$$|a - b| \geq c \quad (1)$$

$$3.5cm \geq c \quad (2)$$

c cannot be $3.4cm$

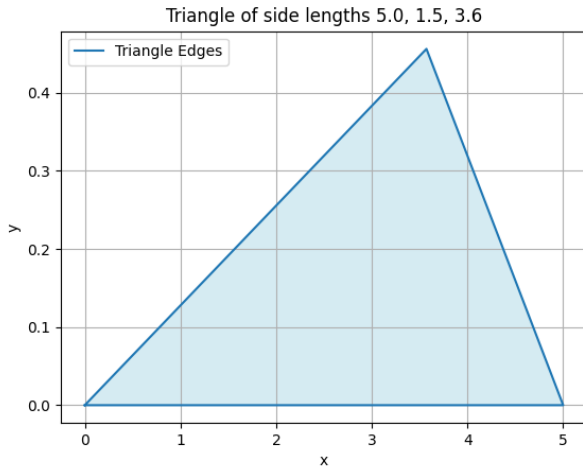


Fig. 4: Triangle with sides 5cm , 1.5cm , and 3.6cm

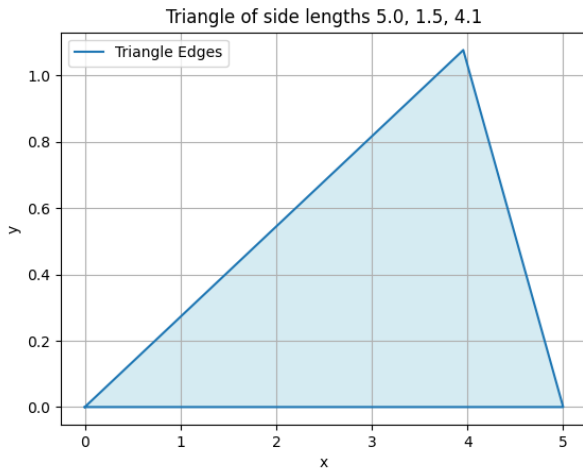


Fig. 4: Triangle with sides 5cm , 1.5cm , and 4.1cm

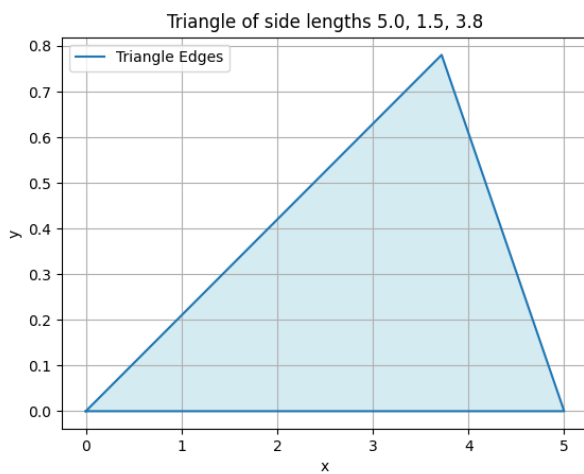


Fig. 4: Triangle with sides 5cm, 1.5cm, and 3.8cm