Triangle sides, medians and altitudes — Further practice

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Further practice 11

Two sides are 4 cm and 9 cm. Which offered third side makes a triangle?

A. 13 cm
B. 14 cm
C. 8 cm
D. 5 cm

Further practice 12

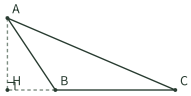
A triangle has sides 2.5,3.5,4 cm. Find its perimeter.

Further practice 13

AM is a median and BC=18 cm. Find CM.

Further practice 14

In the diagram, which given condition makes AH an altitude from A?



Geometry diagram; not drawn to scale except for construction tasks.

Extension 15

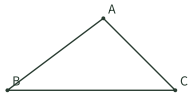
An isosceles triangle has two stated side lengths 4 cm and 9 cm. Which equal-side choice is possible?

A. Both choices are possible.
B. Neither choice is possible.
C. Equal sides 9 cm, base 4 cm.
D. Equal sides 4 cm, base 9 cm.

Extension 16

Does a vertex angle bisector always bisect the opposite side? Test the shown unequal-side triangle.

A. Yes, by the definition of bisector.
B. Yes, for every triangle with positive sides.
C. Only the drawing direction matters.
D. No; angle equality alone does not give a midpoint.



Geometry diagram; not drawn to scale except for construction tasks.