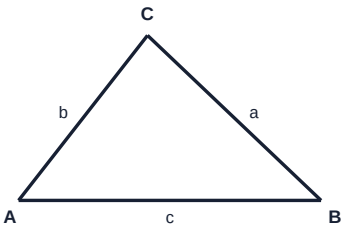


Law of Cosines

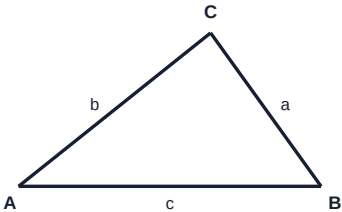
Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

1. Given  $b = 9$ ,  $c = 13$ , and included angle  $A = 52^\circ$ , find side  $a$ . Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

2. Given  $a = 10$ ,  $b = 13$ , and  $c = 16$ , find angle  $C$ . Round the final answer to the nearest tenth.

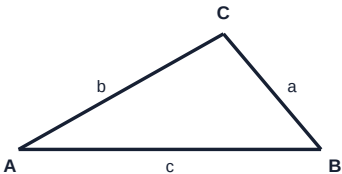


Reference sketch; calculate using the givens.

Law of Cosines

Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

3. Given  $a = 9$ ,  $b = 14$ , and  $c = 18$ , find angle C. Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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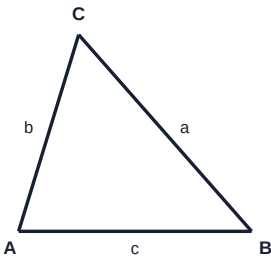
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4. Given  $b = 15$ ,  $c = 17$ , and included angle  $A = 73^\circ$ , find side a. Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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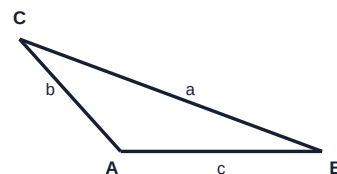
# Math Sheet

Name \_\_\_\_\_ Score \_\_\_\_\_ Teacher \_\_\_\_\_ Date \_\_\_\_\_

## Law of Cosines

Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

5. Given  $b = 9$ ,  $c = 12$ , and included angle  $A = 132^\circ$ , find side  $a$ . Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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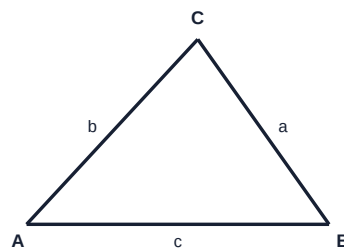
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6. Given  $a = 9$ ,  $b = 10$ , and  $c = 12$ , find angle  $C$ . Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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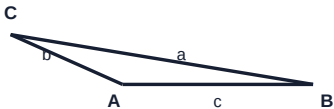
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Law of Cosines

Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

7. Given  $b = 9$ ,  $c = 14$ , and included angle  $A = 156^\circ$ , find side  $a$ . Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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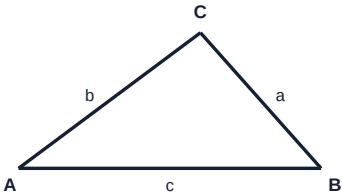
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8. Given  $a = 12$ ,  $b = 15$ , and  $c = 20$ , find angle  $C$ . Round the final answer to the nearest tenth.



Reference sketch; calculate using the givens.

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