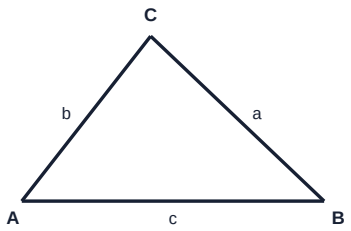
Name _____ Score _____ Teacher _____ Date _____

Law of Cosines

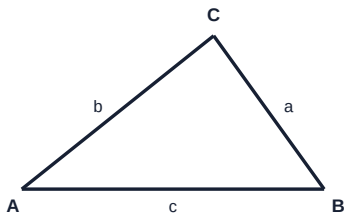
Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

1. **Given b = 9, c = 13, and included angle A = 52°, 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.

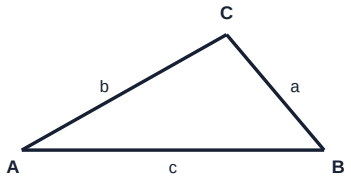
Angles are in degrees. Round only final answers.

Name _____ Score _____ Teacher _____ Date _____

Law of Cosines

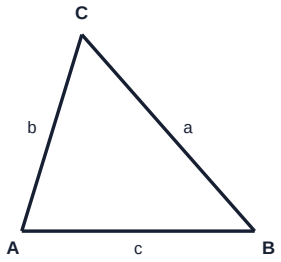
Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

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.

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



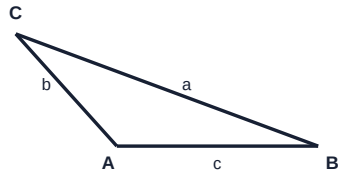
Reference sketch; calculate using the givens.

Name _____ Score _____ Teacher _____ Date _____

Law of Cosines

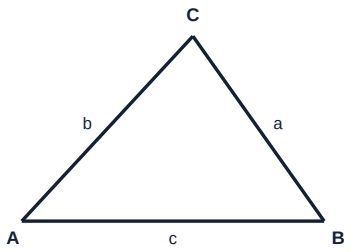
Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

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



Reference sketch; calculate using the givens.

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.

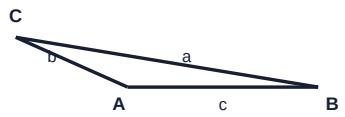
Angles are in degrees. Round only final answers.

Name _____ Score _____ Teacher _____ Date _____

Law of Cosines

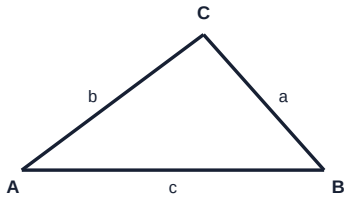
Use the law of cosines to find the requested side or angle. Keep full calculator precision until the final answer, then round as directed.

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



Reference sketch; calculate using the givens.

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.

Angles are in degrees. Round only final answers.