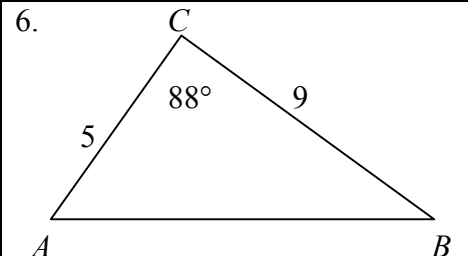
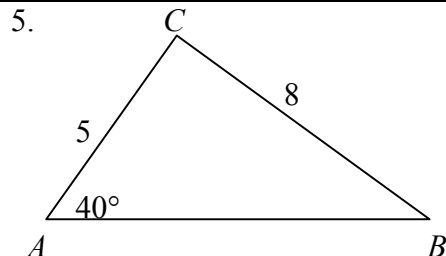
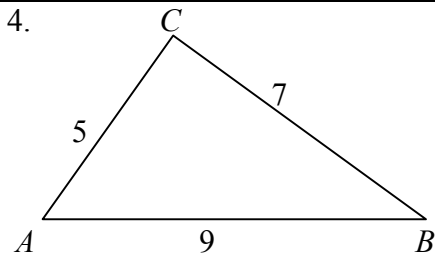
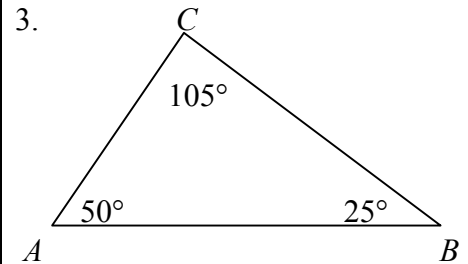
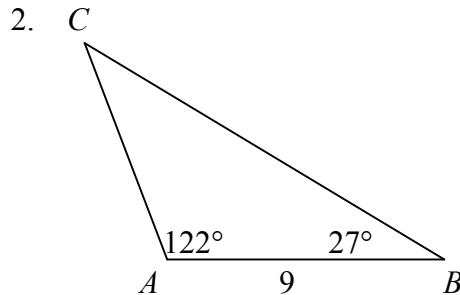
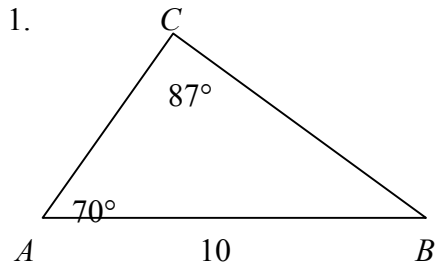


When is the Law of Sines Useful?

Which of the following triangles can be solved
using only the Law of Sines and the knowledge that there are 180° in a triangle?

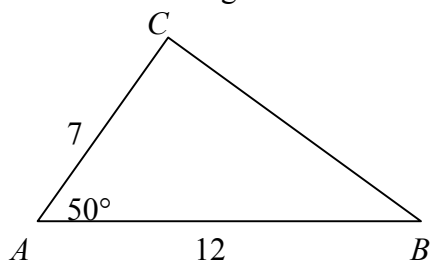
If the triangle can be solved with that information, solve the triangle.

Round answers to two decimal places. If it cannot be solved with that information, indicate that.

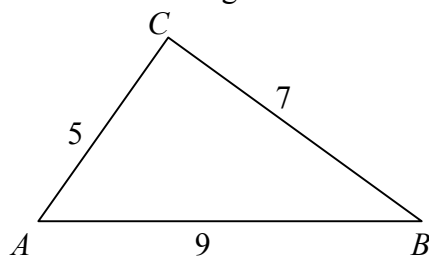


Interesting Triangle Trigonometry Problems

1. Solve the triangle. Round to 2 decimal places.



2. Solve the triangle. Round to 2 decimal places.



3. Using the Law of Cosines and your calculator, solve for c . Hint: you need to use quadratic formula.

$$A = 50^\circ, b = 10, a = 9$$

4. Using the Law of Cosines and your calculator, solve for c . Hint: you need to use quadratic formula.

$$A = 50^\circ, b = 10, a = 11$$

5. Using the Law of Cosines and your calculator, solve for c . Hint: you need to use quadratic formula.

$$A = 50^\circ, b = 10, a = 10\sin 50^\circ$$

6. Using the Law of Cosines and your calculator, solve for c . Hint: you need to use quadratic formula.

$$A = 50^\circ, b = 10, a = 7$$

When is the Law of Sines Useful? Answers

1. $B = 23^\circ$ $b = 3.91$ $a = 9.41$	2. $C = 31^\circ$ $b = 7.93$ $a = 14.82$	3. cannot be solved with just those formulas
4. cannot be solved with just those formulas	5. $B = 23.69^\circ$ $C = 116.31^\circ$ $c = 11.16$	6. cannot be solved with just those formulas

Interesting Triangle Trigonometry Problems Answers

1. $a = 9.22$ $B = 35.56^\circ$ $C = 94.44^\circ$	2. $B = 33.56^\circ$ $A = 50.70^\circ$ $C = 95.74^\circ$
3. $c = 11.15$ or 1.70	4. $c = 14.32$ or -1.47 (what does the negative mean?)
5. $c = 6.43$ or 6.43 (why the double answer?)	6. $c = 6.43 \pm 3.11i$ (what do complex answers mean?)