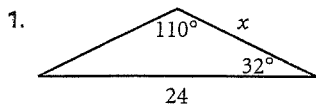


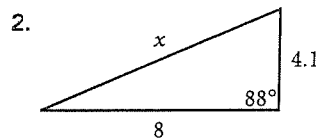


Practice Masters Level B

10.5 The Law of Cosines

In Exercises 1 and 2, which rule should you use, the law of sines or the law of cosines, to find each indicated measurement? Explain your reasoning.



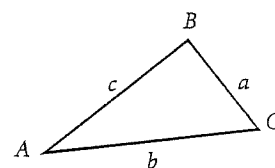


In Exercises 3–5, find the indicated measures. Round your answers to the nearest tenth.

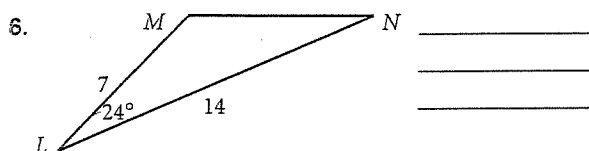
3. $m\angle C = 52^\circ$, $b = 10.3$, $a = 6.1$, $c = ?$ _____

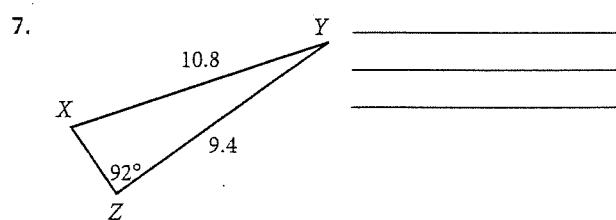
4. $m\angle C = 68^\circ$, $m\angle A = 28^\circ$, $b = 24$, $c = ?$ _____

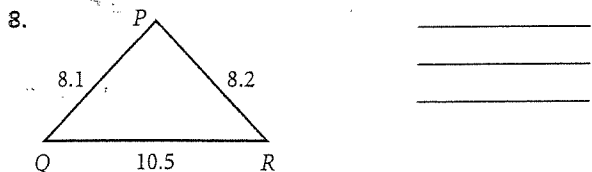
5. $a = 3.2$, $b = 6.5$, $c = 5.0$, $m\angle C = ?$ _____

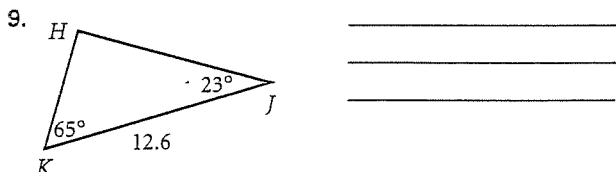


In Exercises 6–9, use the law of cosines and/or the law of sines to solve each triangle. Round answers to the nearest tenth.









10. Two trains depart from the same station on tracks that form a 65° angle. Train A leaves at noon and travels at an average speed of 52 miles per hour. Train B leaves at 1 P.M. and travels at an average speed of 60 miles per hour. How far apart are the trains at 3 P.M.? _____