Lesson 7.5 Practice: Solving Any Triangle

School Launch · Trigonometry · Unit 7: Oblique Triangles: The Laws of Sines and Cosines · Worksheet A

Scientific calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. In $\triangle ABC$, $A = 68°$, $B = 70°$, $a = 25$. Find C and b (nearest tenth). EASY

2. In $\triangle ABC$, $A = 76°$, $B = 60°$, $a = 22$. Find C and b (nearest tenth). EASY

3. In $\triangle ABC$, $A = 59°$, $B = 25°$, $a = 19$. Find C and b (nearest tenth). EASY

4. In $\triangle ABC$, $A = 71°$, $B = 50°$, $a = 28$. Find C and b (nearest tenth). MEDIUM

5. In $\triangle ABC$, $A = 28°$, $B = 29°$, $a = 12$. Find C and b (nearest tenth). MEDIUM

6. In $\triangle ABC$, $A = 47°$, $B = 66°$, $a = 12$. Find C and b (nearest tenth). MEDIUM

7. In $\triangle ABC$, $A = 56°$, $B = 30°$, $a = 5$. Find C and b (nearest tenth). MEDIUM

8. A triangle has sides $a = 12$, $b = 6$, $c = 13$. Find angle C (nearest tenth). HARD

9. A triangle has sides $a = 12$, $b = 7$, $c = 10$. Find angle C (nearest tenth). HARD

10. A triangle has sides $a = 13$, $b = 14$, $c = 26$. Find angle C (nearest tenth). HARD