



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Apply $a/\sin A = b/\sin B = c/\sin C$. ✓ Find a missing side or angle. ✓ Use the triangle angle-sum.
- ✓ Recognise when the Law of Sines applies.



Section A · Concept Check

• BEGINNER

$4 \times 1 = 4$

- 1 A triangle has $A=50^\circ$, $B=60^\circ$, $a=12$. Side b is about:
☐ A. 13.57 ☐ B. 12 ☐ C. 10 ☐ D. 14.4
- 2 A triangle has angles 55° and 65° . The third angle is:
☐ A. 60° ☐ B. 70° ☐ C. 55° ☐ D. 120°
- 3 A triangle has $B=90^\circ$, $C=30^\circ$. Angle A is:
☐ A. 60° ☐ B. 30° ☐ C. 90° ☐ D. 120°
- 4 The Law of Sines uses:
☐ A. $a/\sin A = b/\sin B$ ☐ B. $a^2 = b^2 + c^2$
☐ C. $a \cdot b \cdot c$ ☐ D. $a + b + c$



Section B · Problem Solving

• INTERMEDIATE

$2 + 3 \times 3 = 11$

- 5 Law of Sines: $a/\sin A = b/\sin B =$ _____
- 6 The angles of a triangle sum to _____
- 7 A triangle has $A=50^\circ$, $B=60^\circ$, $a=12$. Find side b .

- 8 A triangle has $A=35^\circ$, $a=7$, $c=10$. Set up the proportion to find angle C .

- 9 A triangle has angles 55° and 65° . Find the third angle.



Section C · Challenge

• CHALLENGE

5

- 10 A triangle has $B=90^\circ$, $C=30^\circ$. Find angle A .



Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

✂ ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

$$1-A \quad 2-A \quad 3-A \quad 4-A \quad | \quad 5 \ c/\sin C \quad 6 \ 180^\circ \quad 7 = 12 \cdot \sin 60^\circ / \sin 50^\circ \approx 13.57 \quad 8 = 7 / \sin 35^\circ = 10 / \sin C$$

$$9 = 60^\circ \quad | \quad 10 = 60^\circ$$