

Accelerated Math 3 – Law of Sines

Answers from Area of Triangles Worksheet

3. $R = 7 \sin 3 \approx 0.988$

7. $a = \frac{20\sqrt{2}}{7}$

9. $\theta = \sin^{-1} \frac{5}{7} \approx 0.7956$

12. $12 = \frac{1}{2} 8(5) \sin(\theta) \Rightarrow \frac{12}{20} = \sin(\theta) \Rightarrow \theta = \sin^{-1} \frac{12}{20} \Rightarrow \theta \approx 36.9^\circ$ But $\theta > 90^\circ \therefore \theta = 180 - 36.9^\circ \approx 143.1^\circ$

15. $R = 20$

21. $u = \sin^{-1} \frac{5}{6} \approx 0.9851$

Law of Sines Problems

Do page 262 #1-9 (odd) in your textbook and the following problems.

10. Suppose $a = 4$, $b = 3$, and $B = 30^\circ$. Find A (assume $A < 90^\circ$), C , and c .

11. Suppose $a = 14$, $b = 13$, and $B = 60^\circ$. Find A (assume $A > 90^\circ$), C , and c .

Read Section 6.2