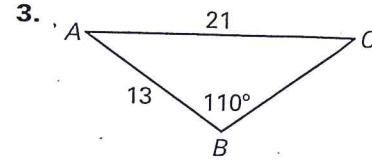
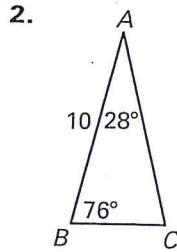
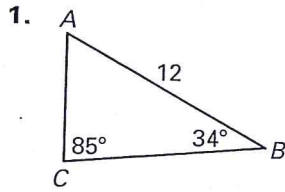
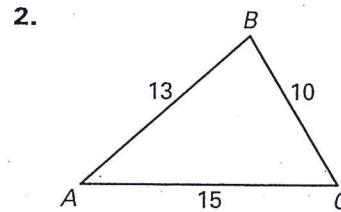
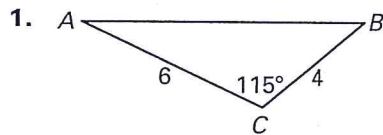


Chapter 9 Final Exam Review

Solve $\triangle ABC$.



Solve $\triangle ABC$.



3. $A = 60^\circ, b = 14, c = 8$

4. $B = 100^\circ, a = 15, c = 11$

Simplify the expression.

7. $\cot x \sin x$

8. $\cos x + \sin x \tan x$

9. $\frac{\sin\left(\frac{\pi}{2} - x\right)}{\cos\left(\frac{\pi}{2} - x\right)}$

10. $\frac{\sin(-x)}{\cos(-x)}$

11. $\sin^2 x + \tan^2 x + \cos^2 x$

12. $\cot\left(\frac{\pi}{2} - x\right) \cos x$

Verify the identity.

11. $\cos x \sec x = 1$

12. $1 - \tan^2 x = 2 - \sec^2 x$

13. $\frac{\tan^2 x}{\sec x} = \sec x - \cos x$

14. $\tan\left(\frac{\pi}{2} - x\right) \sin x = \cos x$

15. $\frac{\cos^2 x}{1 + \tan^2 x} + \frac{\sin^2 x}{\sec^2 x} = \cos^2 x$

16. $\frac{\sin\left(\frac{\pi}{2} - x\right) - 1}{1 - \cos(-x)} = -1$