Lesson 13.6 Worksheet

Name: _____

Solve △ABC. Round answers to the nearest <u>tenth</u>.

1.)

A   9   B

35°

7

C

2.)

A

23   114°   26

C   B

3.)

23   A

C

14

25

B
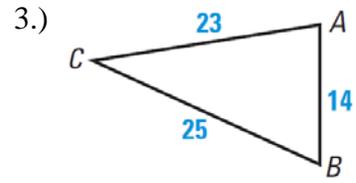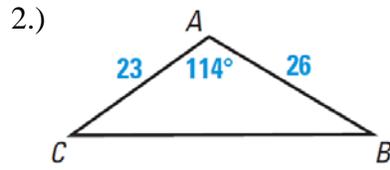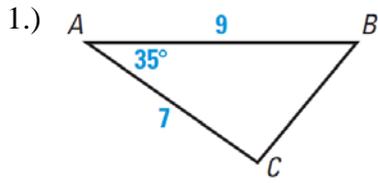
4.) $A = 103°,\ b = 15,\ c = 24$

5.) $a = 38,\ b = 31,\ c = 35$

6.) $B = 63°,\ a = 29,\ c = 38$

7.) $a = 23,\ b = 24,\ c = 20$

Find the area of $\triangle ABC$. Round answers to the nearest <u>tenth</u>.

12.) $a = 31,\ b = 23,\ c = 17$ 13.) $a = 43,\ b = 59,\ c = 48$ 14.)
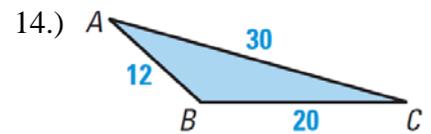
Solve $\triangle ABC$.

15.) $B = 21°,\ b = 17,\ c = 32$

Use the given point on the terminal side of an angle θ in standard position to evaluate the six trigonometric functions of θ.

16.) $(6, -2)$

Evaluate the function WITHOUT USING A CALCULATOR.

17.) $\tan \dfrac{8\pi}{3}$ 18.) $\sin(-840°)$ 19.) $\sec\left(-\dfrac{15\pi}{4}\right)$

Evaluate the expression. Give your answer in both radians and degrees.

20.) $\sin^{-1} -1$ 21.) $\tan^{-1} \dfrac{\sqrt{3}}{3}$ 22.) $\cos^{-1}\left(-\dfrac{\sqrt{2}}{2}\right)$ 23.) $\cos^{-1}\dfrac{1}{2}$