5-3 Lesson Master

SKILLS Objective C

1. Refer to $\triangle HAT$ at the right. Find $h$ to the nearest tenth.

In 2 and 3, consider $\triangle CUB$ where $CU = 48$, $UB = 58$, and $CB = 78$. Find the measure of the given angle to the nearest tenth of a degree.

2. $\angle C$

3. $\angle B$

PROPERTIES Objective F

4. Use the Law of Cosines to show that for the isosceles $\triangle ABC$ pictured at the right, $c = a\sqrt{2 - 2\cos C}$.

PROPERTIES Objective I

5. Three lifeguard stands are positioned as shown in the diagram below. The lifeguards would like to have a buoyant line that would run from Stand I to Stand III for nonswimmers. Approximately how long would the line have to be?

6. At the right is pictured a typical bicycle “diamond” frame, with dimensions given in centimeters. What is the angle between the seat stay and the chain stay?