Name

10-7A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 724–727 for objectives.

SKILLS Objective B

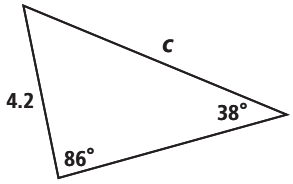
1. Find two angle measures with $0° < \theta < 180°$ where $\sin \theta = 0.358$. Estimate to the nearest degree. _____

2. **Fill in the Blank** Suppose $m\angle A = 142°$, and $\angle B$ is an acute angle with $\sin B = \sin A$. Then, $m\angle B =$ _____.

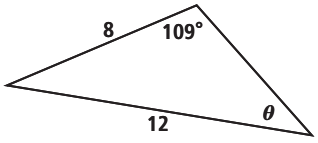
SKILLS Objective C

In 3 and 4, use the triangle below each question and find the value of the variable to the nearest tenth.

3. $c =$ _____

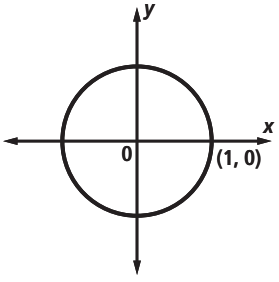


4. $\theta =$ _____



PROPERTIES Objective F

5. Refer to the unit circle at the right to explain why $\sin \theta = \sin(180 - \theta)$ but $\cos \theta \neq \cos(180 - \theta)$.



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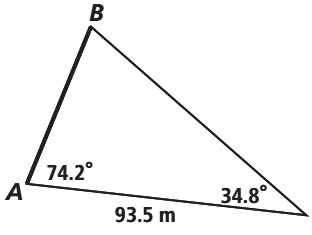
6. One version of the Law of Sines is $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$. Simplify the Law of Sines to obtain a version with no fractions. _____

USES Objective H

7. An engineer is building a bridge from A to B. He can't measure the distance directly, but he knows the measurements shown at the right. Find the length of the proposed bridge to the nearest tenth of a meter.



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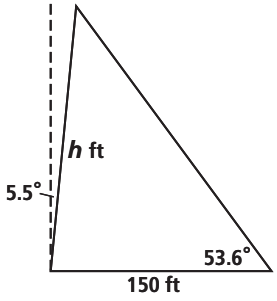
8. The Leaning Tower of Pisa leans 5.5° from the vertical. From a point on the ground 150 ft from the base of the tower, the angle of elevation is 53.6°. Find h, the height the tower would be if upright.



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