

Honors Geometry

Notes Section 7.7

Solve Right Triangles

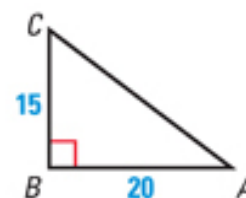
VOCABULARY

Inverse Tangent: _____

Inverse Sine: _____

Inverse Cosine: _____

EXAMPLE 1 Use a calculator to approximate the measure of $\angle A$ to the nearest tenth of a degree.

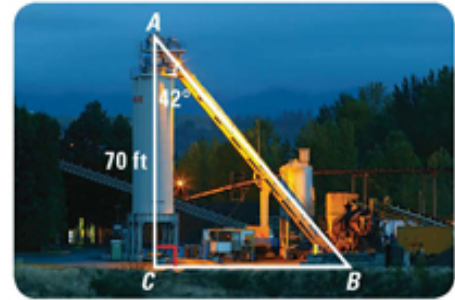


EXAMPLE 2 Let $\angle A$ and $\angle B$ be acute angles in two right triangles. Use a calculator to approximate the measures of $\angle A$ and $\angle B$ to the nearest tenth of a degree.

a) $\sin A = 0.87$ _____

b) $\cos B = 0.15$ _____

EXAMPLE 3 Solve the right triangle. Round decimal answers to the nearest tenth.



STEP 1 Find $m\angle B$

STEP 2 Find BC

STEP 3 Find AB

EXAMPLE 4 Suppose your school is building a raked stage. The stage will be 30 feet long from front to back, with a total rise of 2 feet. A rake (angle of elevation) of 5° or less is generally preferred for the safety and comfort of the actors. **Is the raked stage within the range suggested?**

