\[
\text{opp} \quad x \cdot \sin \theta = \frac{11}{x} \cdot x
\]
\[
\frac{\sin \theta}{\sin \theta} \cdot x = \frac{11}{\sin \theta} \cdot \frac{1}{\sin \theta}
\]
\[
x = 30.7
\]
30. \[ x \]

\[ 34^\circ \]

\[ 28 \]

\[ \text{opp} \quad 28 \cos 34 = \left(\frac{x}{28}\right) \]

\[ 23.2 = x \]
31. \[ x \cos 63 \times = \frac{15\sqrt{3}}{x} \]

\[ \frac{\cos 63}{\cos 63} x = \frac{15\sqrt{3}}{\cos 63} \]

\[ x = 57.2 \]
32. \[ \tan 29° \cdot 32 = \left( \frac{x}{32} \right) \cdot 32 \]

\[ 17.7 = x \]
33. \[ \frac{(20+\sqrt{2}) \sin 38}{\text{adj}} = \frac{x}{20+\sqrt{2}} \]

\[ 17.4 = x \]
GYMNASTICS  The springboard that Eric uses in his gymnastics class has 6-inch coils and forms an angle of 14.5° with the base. About how long is the springboard?

\[ x \sin 14.5^\circ = \left( \frac{6}{x} \right) x \]

\[ x = \frac{6}{\sin 14.5^\circ} \]

\[ x = 24 \]
\[
\cos X = \frac{13}{19}
\]

\[X = \cos^{-1}\left(\frac{13}{19}\right)\]

\[X = 46.8^\circ\]
Use a calculator to find the measure of $\angle D$ to the nearest tenth.

A. $44.1^\circ$
B. $48.3^\circ$
C. $55.4^\circ$
D. $57.2^\circ$

$$\sin X = \frac{16}{23}$$

$$X = \sin^{-1}\left(\frac{16}{23}\right)$$
Solve the right triangle. Round side measures to the nearest hundredth and angle measures to the nearest degree.
Solve the right triangle. Round side measures to the nearest tenth and angle measures to the nearest degree.

A. \( m\angle A = 36^\circ, m\angle B = 54^\circ, \)
\( AB = 13.6 \)

B. \( m\angle A = 54^\circ, m\angle B = 36^\circ, \)
\( AB = 13.6 \)

C. \( m\angle A = 36^\circ, m\angle B = 54^\circ, \)
\( AB = 16.3 \)

D. \( m\angle A = 54^\circ, m\angle B = 36^\circ, \)
\( AB = 16.3 \)
GYMNASTICS. The springboard that Eric uses in his gymnastics class has 6-inch coils and forms an angle of 14.5° with the base. About how long is the springboard?
Use a calculator to find the measure of $\angle D$ to the nearest tenth.

A. $44.1^\circ$
B. $48.3^\circ$
C. $55.4^\circ$
D. $57.2^\circ$