4.8A Applications of Trig

Right \Delta Applications

1) Draw \Delta

2) Solve

A ladder leaning against a house reaches 24 ft up the side of the house. The ladder makes a 60° angle with the ground. How far is the base of the ladder from the house?

\[
\tan 60° = \frac{24}{x}
\]

\[
\frac{\sqrt{3}}{1} = \frac{24}{x}
\]

\[
x = \frac{24 \cdot \sqrt{3}}{3} = 8\sqrt{3} \approx 13.86 ft
\]