Find the measure of the altitude

2. In the triangle shown, solve for $x, y$, and $z$.

3. Solve for the length of the bridge in the Getting Started using the geometric mean.

The geometric mean and the theorems defined in the previous activity can be used to set up proportions to determine unknown lengths for a right triangle if you are given certain information.

## 1. Consider each diagram and solve for the unknown length.

a.

b.


d.


