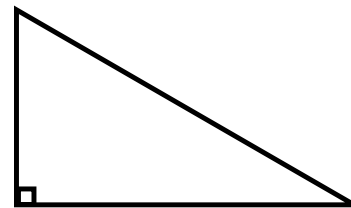


2.1 The Tangent Ratio

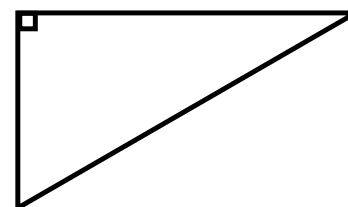
Vocabulary: adjacent means _____

If $\angle A$ is an acute angle in a right triangle, then:

$\tan \angle A =$ _____



ex. Determine the tangent of $\angle G$



* All math operations have an _____ operation that "undoes" the operation. The inverse of \tan is _____

ex. Determine the measure of $\angle G$ from the question above to the nearest degree.

ex. One end of a cable is attached to a lamp post at a height of 8.5 meters above the ground. The other end of the cable is fixed to the ground 14 from the base of the lamp post. What is the angle between the cable and the ground?

ex. A 10-foot ladder leans against the side of a building with its base 4 feet from the wall. What angle does the ladder make with the ground?