UNIT 1, LESSON 8
OFF THE GRID, PART 2
APPLYING THE FORMULA FOR THE AREA OF A TRIANGLE

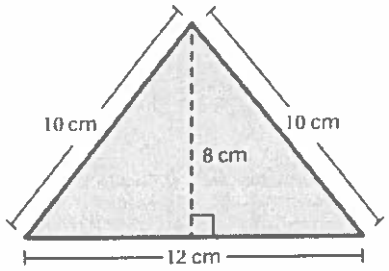
Goal (Essential Question)
How can you Calculate **the** area **of a triangle** off **of a** grid **given any** side **as its** base **?**

The area of any triangle is equal to half **of the** product **of its** base **and** height **.**

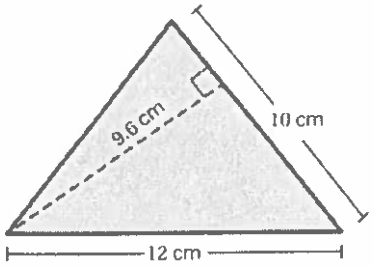
You can select any side **of the triangle to be the** base **.**

The height of a triangle is the perpendicular **distance between a point on the base and the** opposite **corner of the triangle.**

The height is often shown with a dotted **line.**



$$A = \frac{1}{2}bh$$
$$A = \frac{1}{2} \cdot 12 \cdot 8$$
$$A = 48\ cm^2$$



$$A = \frac{1}{2}bh$$
$$A = \frac{1}{2} \cdot 10 \cdot 9.6$$
$$A = 48\ cm^2$$

All sides of the triangle **can be a base, but some base-height pairs are** easier **to measure and calculate with.**