## 11.1 Area of Parallelograms - Notes

The area of a rectangle is its base length multiplied by its height...or length times width.
For a rectangular room such as my 22 ft x 30 ft classroom, the area could be filled with square tiles which are 12 in x 12 in (or one square foot).

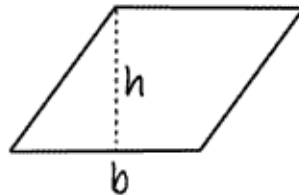Counting the squares here would give 660 tiles.

It's easier to say 22 tiles x 30 tiles = 660 tiles
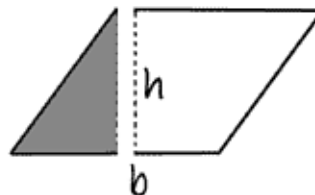or 660 square feet instead of counting the squares.
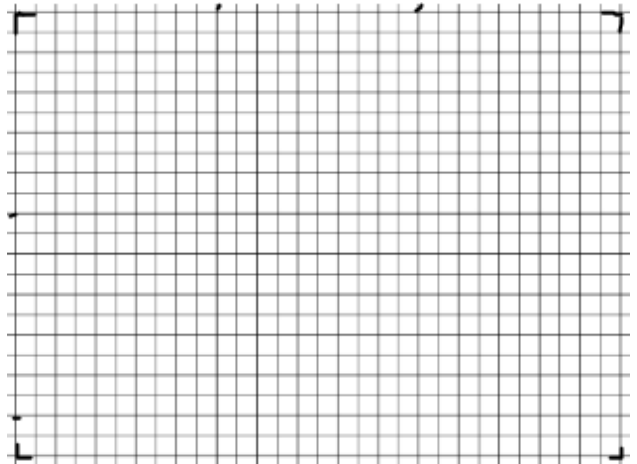
Area of a parallelogram is like area of a rectangle ----> area = base x height. Why is that?

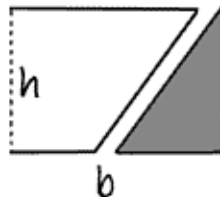### Transforming a Parallelogram into a Rectangle.
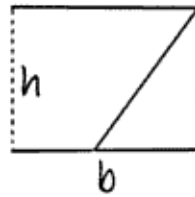
1) Cut along the dashed line.

2) Remove triangular section.

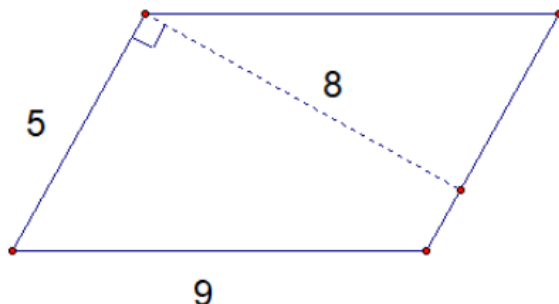3) Place triangular section on opposite side.

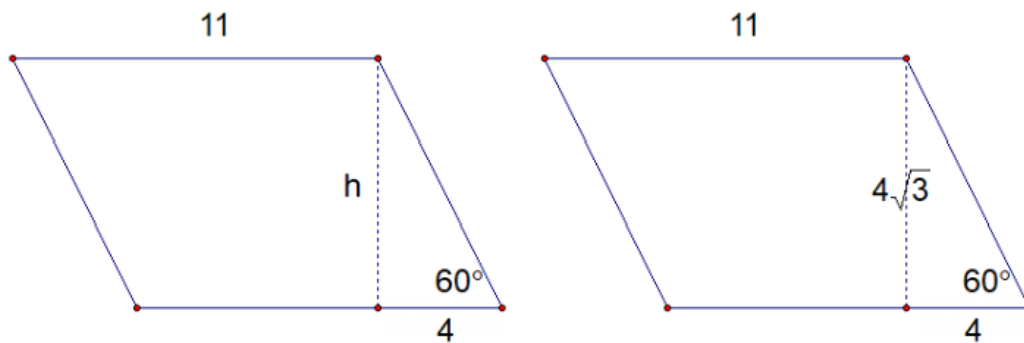4) Rest the triangular shape until it forms a rectangle.

For parallelograms you sometimes have to turn the picture to consider a base from a different perspective.
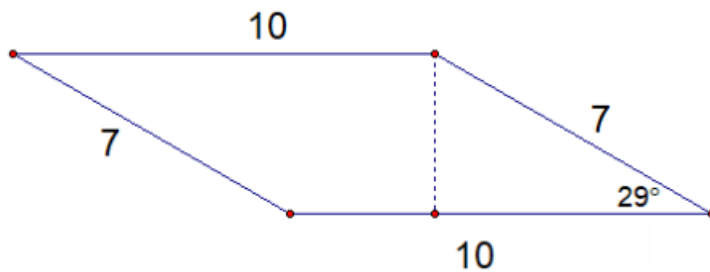
For example, in this parallelogram you would use a base of 5 and a height of 8.

8

5

9

For this parallelogram the base is 11 and the height is figured by using Special Right Triangles or SOHCAHTOA.

For this parallelogram you would use sin 29 = h/7 to find the height.

Here is another short video:

https://www.youtube.com/watch?v=ooHiUYG82t4

And another short video:

https://www.youtube.com/watch?v=duWcobAQo9I