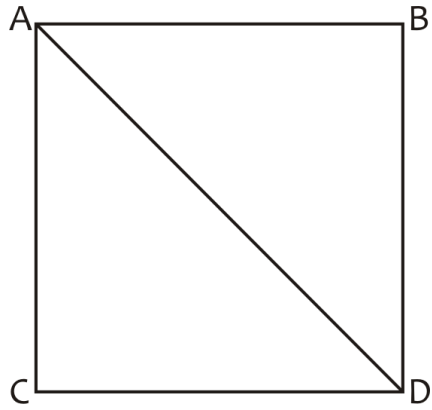
AREA OF A TRIANGLE

Usually two right angled triangles can be formed by dividing or sharing a rectangle or square into two by joining the diagonal points.

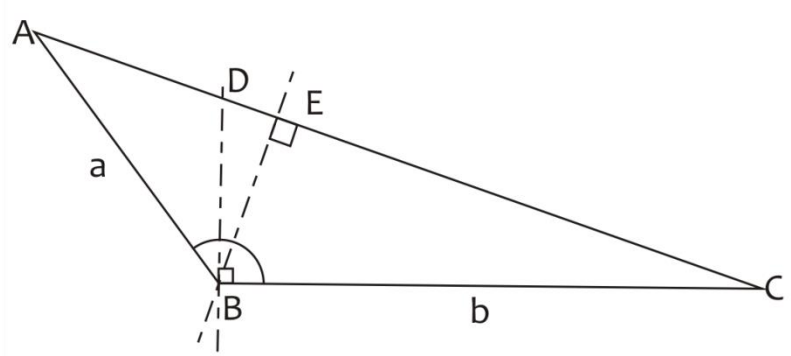


For instance, the above quadrilateral ABCD has been divided into two triangles ABD and ADC.

The area of the quadrilateral ABCD is length x breadth = AC x CD = L x b. Since the triangle is half the equilateral ABCD, the area is also half. That is:

$$\frac{1}{2} \times AC \times CD = \frac{1}{2} \times length \times breadth = \frac{1}{2} lb$$

However for a non-right-angled triangle, the angles in between the sides we choose as length and breadth becomes significant. For example:



∠B, a (chosen length), and b (chosen breadth) are the parameters we could consider for calculating the area of the triangle ABC.

$$Area = \frac{1}{2} ab\ sinB$$