CONSTRUCTION

1. In the given figure, XZ is parallel to BC. AZ = 3cm, ZC = 2cm, BM = 3cm and MC = 5cm. Find the length of XY.

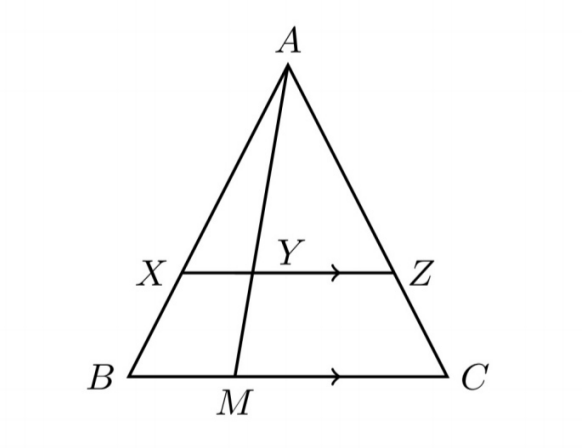

Figure 1: Isosceles Triangle

2. In the given figure, $DE \parallel BC$. If AD = 2units, $DB = AE$ = 3units and $EC = x$units, then find the value of x is:

   (a) 2
   (b) 3
   (c) 5
   (d) $\frac{9}{2}$

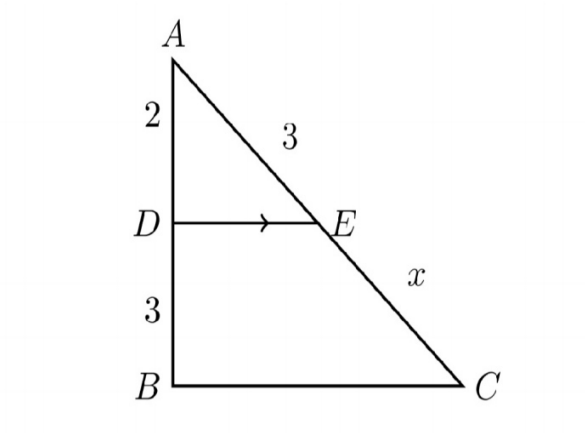

Figure 2: Right Angle Triangle

3. In the given figure, ΔABC and ΔDBC are on te same base BC. If AD intersects BC at **O**, prove that $\frac{ar(\Delta ABC)}{ar(\Delta DBC)} = \frac{AO}{DO}$.

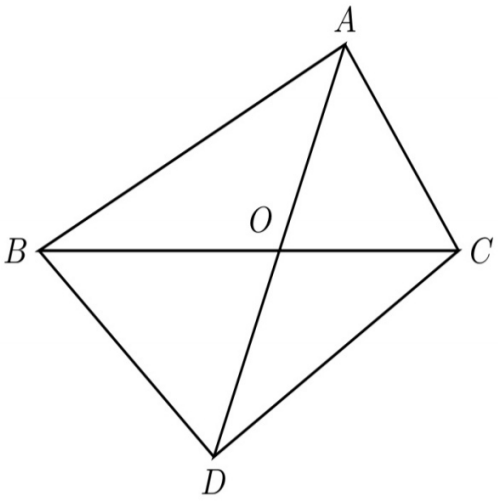

Figure 3: Triangles with same base