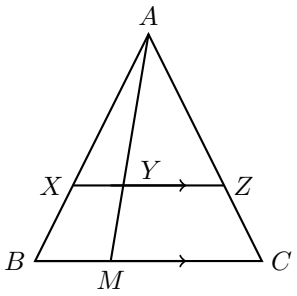
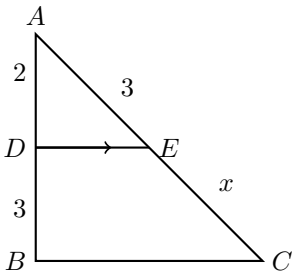
Construction

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



2. In the given figure, DE || 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) $\frac{9}{2}$

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