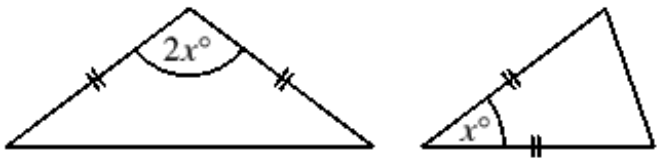
17. The two triangles have equal areas and the four marked lengths are equal. What is the value of x?



A 30 B 45 C 60 D 75 E more information needed

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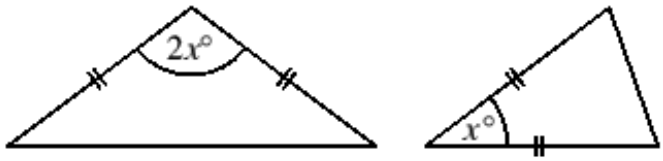
17. C Let the equal sides have length k. The height of the triangle on the left is $k \cos x°$ and its base is $2k \sin x°$, so its area is $k^2 \sin x° \cos x°$. The height of the triangle on the right is $k \sin x°$ and its base is k, so its area is $\frac{1}{2}k^2 \sin x°$. Hence $\cos x° = \frac{1}{2}$ and so $x = 60$.



(*Alternatively, the formula* $\Delta = \frac{1}{2}ab \sin C$ *can be used to show that* $\sin x° = \sin 2x°$; *hence* $x + 2x = 180$.)