## What's My Angle? Reflecting the special triangles in the unit circle picture

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## The special triangles we will need are the versions with hypotenuse 1





We want the version whose hypotenuse is 1:



First example: the half-equilateral triangle, at its smallest angle  $\frac{\pi}{6}$ 

We embed the triangle so the small angle is in standard position:

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First example: the half-equilateral triangle, at its smallest angle  $\frac{\pi}{6}$ 

We embed the triangle so the small angle is in standard position:



• The coordinates of the point on the unit circle are  $\left(\frac{\sqrt{3}}{2}\right)$ 

$$\left(\frac{\sqrt{3}}{2},\frac{1}{2}\right)$$

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## First example: the half-equilateral triangle, at its smallest angle $\frac{\pi}{6}$



Reflect over the vertical axis into the second quadrant:

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