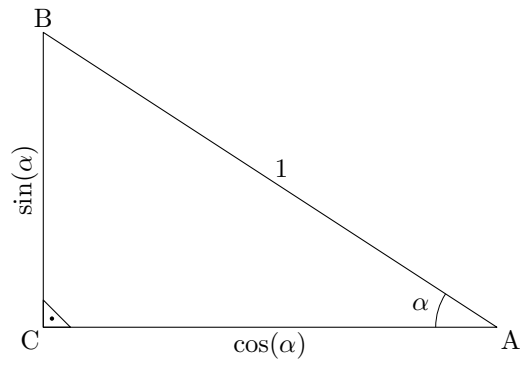


15.4



$$AC = 1 \cdot \cos(\alpha) = \cos(\alpha)$$

$$BC = 1 \cdot \sin(\alpha) = \sin(\alpha)$$

1) Le théorème de Pythagore stipule que $AC^2 + BC^2 = AB^2$, c'est-à-dire $(\cos(\alpha))^2 + (\sin(\alpha))^2 = 1^2$ ou encore $\cos^2(\alpha) + \sin^2(\alpha) = 1$.

$$2) \tan(\alpha) = \frac{BC}{AC} = \frac{\sin(\alpha)}{\cos(\alpha)}$$