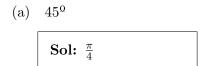


Departamento de Matemáticas $1^{\underline{0}}$ Bachillerato



23 - Trigonometría

1. p039e01 - Expresa en radianes los siguientes ángulos, dados en grados:



Sol: $\frac{5\pi}{12}$

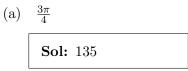
Sol: $\frac{7\pi}{12}$

(b) 75°

(c) 105° (d) 230°

Sol: $\frac{23\pi}{18}$

2. p039e02 - Expresa en grados los siguientes ángulos dados en radianes:



Sol: 300

Sol: 810

 5π

(c) $\frac{3\pi}{2}$

(e) $\frac{4\pi}{3}$

(b) $\frac{5\pi}{3}$

(d) $\frac{9\pi}{2}$

Sol: 240

 $3.\ \, \mathrm{p039e05y6}$ - Demostrar si son verdaderas o falsas las siguientes ecuaciones:

(a) $\sec \alpha^2 + \csc \alpha^2 = \sec \alpha^2 \cdot \csc \alpha^2$

Sol:
$$\left[\frac{8}{-\cos(4\alpha)+1}, \frac{8}{-\cos(4\alpha)+1}\right] \to \text{True}$$

(b) $\frac{\tan \alpha + \tan \beta}{\cot \alpha + \cot \beta} = \tan \alpha \cdot \tan \beta$

Sol: $[\tan(\alpha)\tan(\beta), \tan(\alpha)\tan(\beta)] \rightarrow \text{True}$

(c) $\frac{\sin \alpha \cdot \cos \alpha}{\cos \alpha^2 - \sin \alpha^2} = \frac{\tan \alpha}{1 - \tan \alpha^2}$

Sol: $\left[\frac{\tan{(2\alpha)}}{2}, \frac{\tan{(2\alpha)}}{2}\right] \to \text{True}$