

Desafio 1 - Octave

Tintaya Conde Reddy Abel

April 2021

5. Calculate:

(a)
$$\frac{\sin(\frac{7\pi}{9})}{\cos^2(\frac{5}{7}\pi)} + \frac{1}{7}\tan(\frac{5}{12}\pi) = 2.186667587$$

(b)
$$\frac{\tan(64^\circ)}{\cos^2(14^\circ)} - \frac{3\sin(80^\circ)}{\sqrt[3]{0.9}} + \frac{\cos(55^\circ)}{\sin(11^\circ)} = 128.63984$$

6. Define the variable x as x = 2.34, then evaluate:

(a)
$$2x^4 - 6x^3 + \frac{14}{8x^2} + 9.1 = 73.22584672$$

(b)
$$\frac{e^{2x}}{\sqrt{14 + x^2 - x}} = 26.0344566$$

7. Define the variable t as t = 6.8, then evaluate:

(a)
$$\ln(|t^2 - t^3|) = 5.591703142$$

(b)
$$\frac{75}{2t}\cos(0.8t - 3) = -4.212216188$$

8. Define the variables x and y as x = 8.3 and y = 2.4, then evaluate:

(a)
$$x^2 + y^2 - \frac{x^2}{y^2} = 62.68993056$$

(b)
$$\sqrt{xy} - \sqrt{x+y} + (\frac{x-y}{x-2y})^2 - \sqrt{\frac{x}{y}} = 2.17407046$$