∠B = θ =

$\sin(\theta) = \frac{6}{11}$

$\cos(\theta) = \frac{9}{11}$

$\theta = 180 - 90 - \alpha$

$\theta = 180 - 90 - 56{,}30$

$\theta = 33{,}69006753$

$\tan(\alpha) = \frac{9}{6}$ ✓

$\tan^{-1}\left(\frac{9}{6}\right) = 0{,}9272952$

$\alpha = 56{,}309932°$

ESCLARECIMENTO

MENORIDADE

LIBERDADE

RAZÃO:

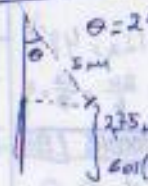
A SAÍDA DA MENORIDADE, EM DIREÇÃO AO ESCLARECIMENTO FAZENDO PÚBLICO USO DA RAZÃO, CONDUZ DE MODO PARADOXAL, A LIBERDADE A SUA DELIMITAÇÃO. O BENDAMENTO LIVRE, LEVA AO AGIR DE ACORDO COM A LIBERDADE, DE MODO A MODIFICAR O ESPAÇO CONHECIDO, QUE, AGORA TEM O HOMEM COM SUA DIGNIDADE

E SEU USO LIVRE DA RAZÃO.

M = ESC | PRECEITO

M = MENORIDADE

m



$\theta = 29°$

5m

2,75m

$\cos(\theta) = \frac{A}{5}$ ✓

$A = 5\cos(\theta) = 4{,}37309859$

$H = 2{,}75 + 4{,}37 = 7{,}12$

204

$5\cos(6x) + 6 = 9$

$\cos(6x) = \frac{9-6}{5}$

$\cos^{-1}\left(\frac{3}{5}\right) = 0{,}9272952$

$2\pi - \alpha = 5{,}355919009$

$\alpha = 306{,}869898°$

$\beta = 306{,}869898°$

$\frac{\alpha}{6} + n \cdot \frac{360}{6} = x$

$x = 8{,}8550706° + n \cdot 60°$

$x = \pm \frac{\alpha}{6} + n \cdot \frac{360}{6}$ ✓

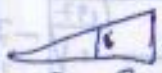
205

$\frac{2}{1} = \frac{1}{x}$ $\quad \frac{x}{2} = \frac{1}{2}$

$\frac{2}{1} = \frac{2+1}{x}$

$x = \frac{3}{2}$ ✓

206



$\frac{x}{6} = \frac{x+8}{8}$

$8x = 6x + 48$

$x = \frac{6x}{8} + \frac{48}{8}$

$8x - 6x = 48$

$2x = 48$ ✓

$x = \frac{48}{2}$ $\quad x = 24$

207

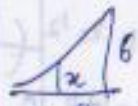
$\frac{10}{6} = \frac{10+x}{10}$

$6x + 60 = 100$

$6x = 100 - 60$

$x = \frac{40}{6} = \frac{20}{3}$ ✓

208



$\frac{3}{x} = \frac{3+4}{6}$

$3x + 4x = 18$ ✓

$7x = 18$ $\quad x = \frac{18}{7}$

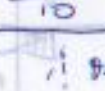
209

$\frac{10}{2} = \frac{10+1}{x}$ $\quad x = \frac{11}{5}$

$x = \frac{20+2}{10}$ $\quad x = \frac{22}{10}$

210

θ = 16°



O =

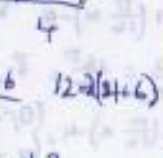
15

$\tan(\theta) = \frac{O}{15}$ $\quad O = 15\tan(\theta)$

$\tan\left(76 \times \frac{\pi}{180}\right) \times 15$

$= 60.1617440$

211



AB =

$\cos(83) = \frac{15}{H}$

$H = 15\cos(83)$

$H = \tan(83) = \frac{O}{15}$

$O = 122.165196$

$\sin(\alpha) = \frac{15}{H}$ $\quad H = \frac{15}{\sin(\alpha)}$

$H = \frac{15}{\cos(83)} = 123.2264$

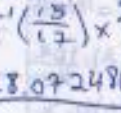
$c^2 = a^2 + b^2 - 2ab\cos(\alpha)$

$c^2 = (15)^2 + (12)^2 - 2(12)(15)\cos(83)$

$c = \sqrt{325.4730}$

$c = 18.03127924$ ✓

20/10/2022



$\frac{x+6}{11} = \frac{x}{8}$

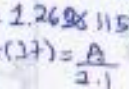
$8(x+6) = 11x$

$11x = 8x + 48$

$11x - 8x = 48$

$x = \frac{48}{3} = 16$

213

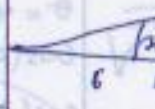


$\frac{3}{2} = \frac{3+x}{11}$ $\quad 33 = 2(3+x)$

$6 + 2x = 33$ $\quad 2x = 33 - 6$

$x = \frac{27}{2}$ ✓

212



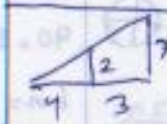
$\frac{6}{x} = \frac{4+6}{2}$ $\quad 12 = 2(x+6)$

$4x + 6x = 12$

$10x = 12$ $\quad x = \frac{12}{10}$

$x = \frac{6}{5}$ ✓

213



$\frac{4}{2} = \frac{x(4+3)}{x} = \frac{2(4+3)}{4x}$

$x = \frac{8+6}{4} = \frac{14}{4} = \frac{7}{2}$

214

$\cos(\alpha) = \frac{15}{17}$

$\cos^{-1}\left(\frac{15}{17}\right) \times \frac{180}{\pi}$

$= 28.07249869°$ ✓

215

$\sin(37) = \frac{O}{2.1}$

$O = 2.1\sin(37°)$

$O = 2.25\sin\left(37 \times \frac{180}{\pi}\right) \times \frac{\pi}{180}$

$O = 1.2686153$ km

$\cos(37) = \frac{A}{2.1}$

$A(d) = 2.1\cos(37°)$ ✓

$A(d) = 1.6771457$ km

216

$\sin(\theta) = \frac{443}{H}$

$\tan(\theta) = \frac{443}{18}$

$\tan^{-1}\left(\frac{443}{18}\right) = 1.5201861$

$\theta \times \frac{180}{\pi} = 87.673297°$ ✓

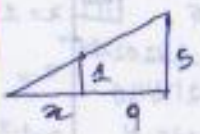
217

$\sin(15) = \frac{150}{H}$

$H = \frac{150}{\sin\left(15 \times \frac{\pi}{180}\right)}$ ✓

$H = 579.555496$

218



$\frac{x+9}{5} = \frac{x}{1}$ $\quad x9 = 5x$

$x = \frac{9}{4}$ ✓

219

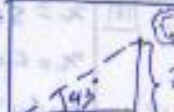
m∠A ✓

$\sin(\theta) = \frac{6}{14}$

$\sin^{-1}\left(\frac{6}{14}\right) = 0.42910$

$\sin^{-1}\left(\frac{6}{14}\right) \times \frac{180}{\pi} = 25.37698$

220



$\cos(43) = \frac{d}{H}$

$d = 7$

$\sin(43) = \frac{7}{H}$ $\quad H = \frac{7}{\sin(43)}$

$H = 10.2639543$

$d = H\cos(43)$ ✓

$d = 7.5073097$ km

$g = -\sin(8x - 3) - 5$

Amp = |-1| = 1 ✓

100%

TRIGONOMETRIA

20/10/22