CEFET –RJ Gabarito Matemática 2ª fase.

01- **(a)** $x = \dfrac{y-1}{3y+2}$ **(b)** $y = \dfrac{1+2.(\dfrac{t-1}{3t+2})}{1-3.(\dfrac{t-1}{3t+2})} = t$

02- $x = 2 \cdot 338 = 676$. Logo $\sqrt{x} = 26$

03- $\dfrac{\sqrt{6}-\sqrt{2}}{4} = \dfrac{\sqrt{x-\sqrt{3}}}{2} \Rightarrow x - \sqrt{3} = \dfrac{6+2-2\sqrt{12}}{4} \Rightarrow$ logo $x = 2$

04- $\dfrac{42-38}{42-40} = \dfrac{10-x}{10-8,5} \Rightarrow x = 7$

05- $\begin{cases} n = v + 18 + d \\ \dfrac{v}{d} = \dfrac{5}{1} \\ \dfrac{v+6}{d} = \dfrac{6}{1} \end{cases} \Rightarrow d = 6, v = 30, n = 54$

06- (a) $7,68 \cdot 10^{-3}\ m^2$ (b) $4,00768\ m^2 \cong 4,0077\ m^2 \cong 4,008\ m^2 \cong 4,01 m^2$

07- $4000 + 8000 + 16000 + 32000 + 64000 \cdot x > 400.000 \Rightarrow x > 5,3125$
$\Rightarrow x = 6 \Rightarrow n = 4 + 6 = 10$ multas

08- $x^2 - x + 2 = 0$ => x = -2 ou x = 1 => A = (-2, 0) ; B = (1, 0) ; C= (0, 2)
=> Área = $\dfrac{3.2}{2} = 3\ cm^2 = 0,0003\ m^2$

09- $PT^2 = PA \cdot PB \Rightarrow 16^2 = 32 \cdot PB \Rightarrow PB = 8 \Rightarrow AB = 24 \Rightarrow 13^2 = 12^2 + d^2 \Rightarrow d = 5$ cm

10- $\dfrac{\pi r^2}{2} = 128\pi \Rightarrow r = 16cm \Rightarrow l = \dfrac{2\pi.16.60}{360} \Rightarrow l = \dfrac{16\pi}{3} m$