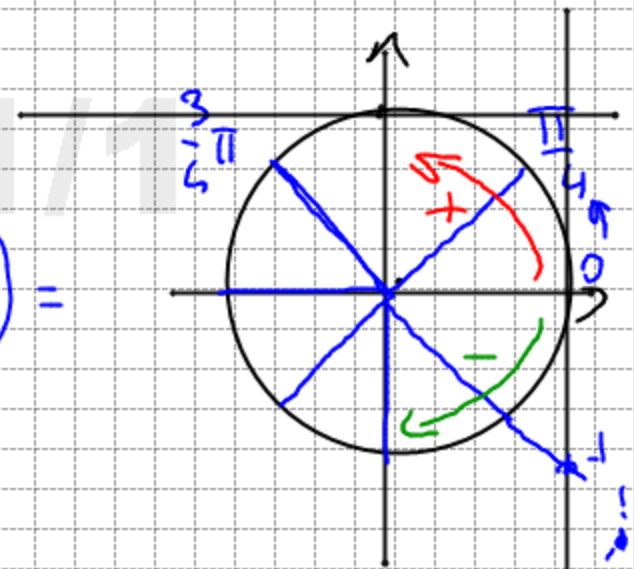


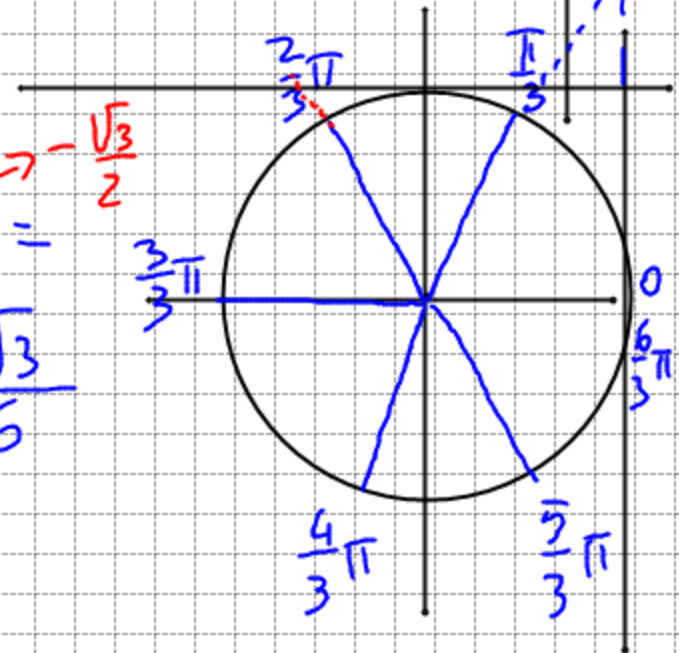
N1 PAG 54

$$\begin{aligned} & \operatorname{sen} \frac{\pi}{4} + \cos \frac{3}{4} \pi + \operatorname{tg} \left(-\frac{5}{4} \pi \right) + \operatorname{ctg} \left(-\frac{3}{2} \pi \right) = \\ & = \frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{2} + (-1) + 0 = -1 \end{aligned}$$



N2

$$\begin{aligned} & \operatorname{tg} \frac{4}{3} \pi + \operatorname{ctg} \left(-\frac{\pi}{3} \right) + \operatorname{tg} (-\pi) + \operatorname{sen} \frac{4}{3} \pi = \\ & = \sqrt{3} + \left(-\frac{\sqrt{3}}{3} \right) + 0 + \left(-\frac{\sqrt{3}}{2} \right) = \frac{2\sqrt{3}}{3} - \frac{\sqrt{3}}{2} = \frac{\sqrt{3}}{6} \end{aligned}$$



N3

$$\begin{aligned} & \operatorname{ctg} \left(-\frac{2}{3} \pi \right) + \operatorname{ctg} \left(-\frac{4}{3} \pi \right) + \operatorname{sen} \left(-\frac{\pi}{2} \right) + \cos (-\pi) = \\ & = \frac{+\frac{1}{2}}{+\frac{\sqrt{3}}{2}} + \frac{+\frac{1}{2}}{-\frac{\sqrt{3}}{2}} + (-1) + (-1) = \\ & = -2 \end{aligned}$$

