

$$V(t) = 20 \sin(628,32t - 10^\circ)$$

$$628,32 = 2\pi f \Rightarrow f = 100 \text{ Hz}$$

$$V_{eff} = \frac{20}{\sqrt{2}} = 14,14 \text{ V}$$

$$V = 14,14 \angle -10^\circ$$

$$R = 68 \angle 0^\circ$$

$$X_C = 75,4 \angle 90^\circ$$

$$X_L = 72,34 \angle -90^\circ$$

$$|X_C| = \frac{1}{2\pi f C} = 75,4 \Omega$$

$$|X_L| = \frac{1}{2\pi f L} = 72,34 \Omega$$

$$Z_{eq} = 68 \angle 0^\circ + 75,4 \angle 90^\circ + 72,34 \angle -90^\circ$$

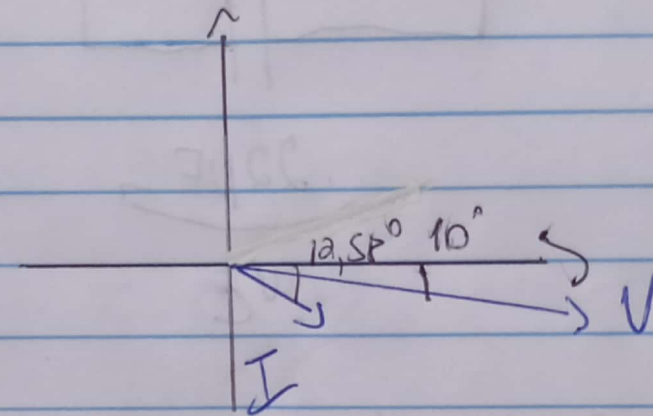
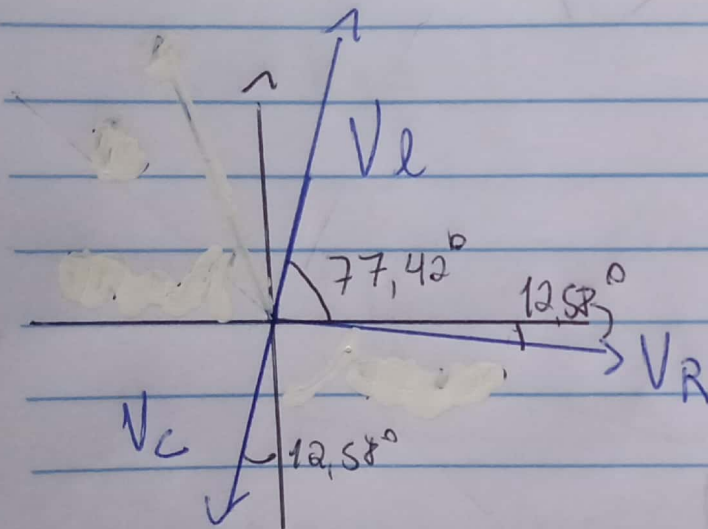
$$Z_{eq} = 68,07 \angle 2,58^\circ$$

$$I = \frac{V}{Z_{eq}} = \frac{14,14 \angle -10^\circ}{68,07 \angle 2,58^\circ} = 0,21 \angle -12,58^\circ$$

$$V_R = I R = 14,28 \angle -12,68^\circ$$

$$V_L = I X_L = 15,83 \angle 77,42^\circ$$

$$V_C = I X_C = 15,19 \angle -102,58^\circ$$



$$V = 14,14 \angle -10^\circ$$

$$I = 0,21 \angle -12,58^\circ$$

$$V_R = 14,28 \angle -12,58^\circ$$

$$V_L = 15,83 \angle 77,42^\circ$$

$$V_C = 15,19 \angle -102,58^\circ$$