$$V_1 = 10.0 \angle 136.4° \text{ Vrms}$$

$$V_2 = 3.45 \angle 25.47° \text{ Vrms}$$

Impedances

$$j4\,\Omega : \quad P = 0$$

$$-j5\,\Omega : \quad P = 0$$

$$6\,\Omega: \quad \frac{\hat{V}_2}{6+j4} = 0.48 \angle -8.22° \text{ Arms}$$

$$P = I_{rms}^2 (6)$$
$$= (0.48)^2 (6)$$
$$= 1.38 \text{ W, ABS}$$

$$2\,\Omega: \quad P = \frac{V_{rms}^2}{2} = \frac{(10)^2}{2} = 50\text{W ABS}$$

$$1\,\Omega: \quad \frac{\hat{V}_2 + 2\angle -45°}{1} = 4.53 \angle 0.88° \text{ Arms}$$

$$P = I_{rms}^2 (1)$$
$$= (4.53)^2 (1) = 20.52 \text{ W, ABS}$$

$$\boxed{\begin{array}{l} \Sigma P = 20.52 + 50 + 1.38 \\ \Sigma P = 71.90 \text{ W ABS} \end{array}}$$
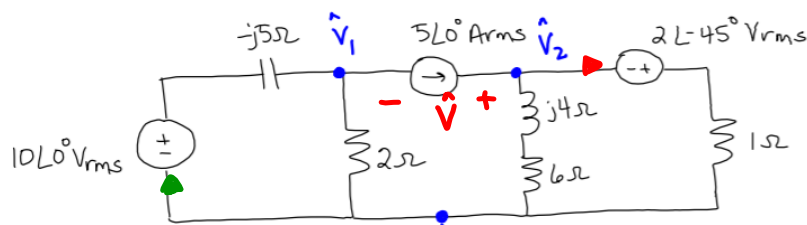
$$V_1 = 10.0 \angle 136.4° \text{ Vrms}$$
$$V_2 = 3.45 \angle 25.47° \text{ Vrms}$$

$$P = V_{rms} \, I_{rms} \cos(\theta - \phi)$$

$2 \angle -45° \text{ Vrms}$

$4.53 \angle 0.88° \text{ Arms}$

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$$P = (2)(4.53) \cos(-45 - 0.88)$$
$$= 6.31 \, W, \text{ Del}$$

$5 \angle 0° \text{ Arms}$ $\hat{V} = \hat{V_2} - \hat{V_1} = 11.69 \angle -27.59° \text{ Vrms}$

$$P = (11.69)(5) \cos(-27.59 - 0) = 51.80 \, W, \text{ Del}$$

$10 \angle 0° \text{ Vrms} : \quad \dfrac{10 \angle 0 - \hat{V_1}}{-j5} = 3.71 \angle 68.2° \text{ Arms}$

$10 \angle 0° : \quad P = (10)(3.71) \cos(0 - 68.2°) = 13.78 \, W, \text{ Del}$

$$\boxed{\begin{array}{l} \Sigma P_{del} = 13.78 + 51.8 + 6.31 \\ = 71.89 \, W, \text{ Del} \end{array}}$$