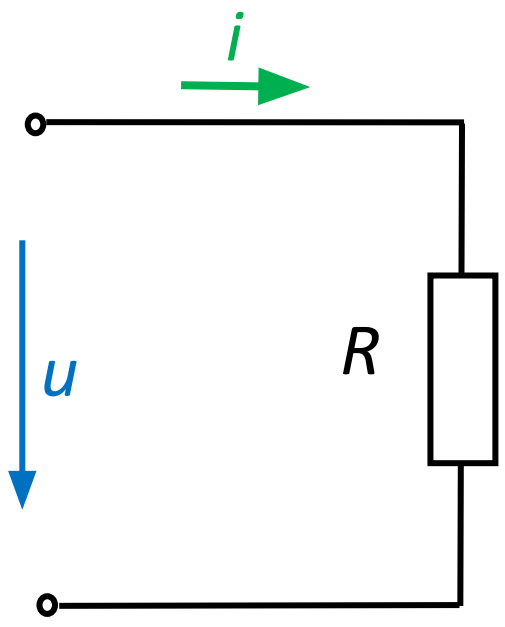
Мгновенное напряжение описывается выражением: $u = 220\sin(314t + \pi/4)$.
Каков закон изменения тока в цепи, если R = 50 Ом?

1. $i = 4{,}4 \sin 314t$

2. $i = 4{,}4 \sin(314t+\pi/4)$

3. $i = 3{,}1 \sin(314t + \pi/4)$

4. $i = 3{,}1 \sin 314t$



Мгновенное напряжение описывается выражением: $u = 220\sin(314t + \pi/2)$.

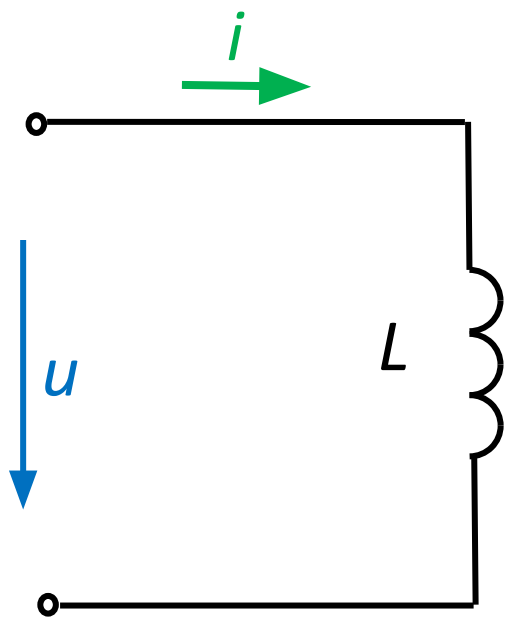
Каков закон изменения тока в цепи, если X_L = 50 Ом?

1. $i = 4{,}4 \sin 314t$

2. $i = 4{,}4 \sin(314t+\pi/2)$

3. $i=3{,}1 \sin(314t+ \pi /2)$

4. $i=3{,}1 \sin 314t$



Мгновенное напряжение описывается выражением: $u = 220\sin(314t + \pi/4)$.

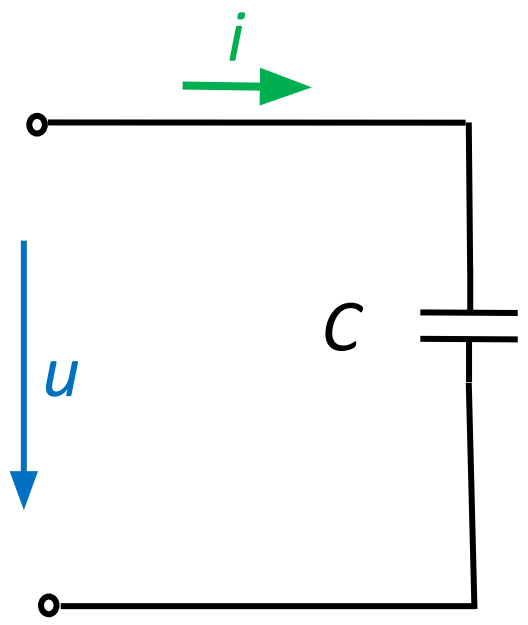
Каков закон изменения тока в цепи, если X_C = 50 Ом?

1. $i = 4{,}4 \sin 314t$

2. $i = 4{,}4 \sin(314t+3\pi/4)$

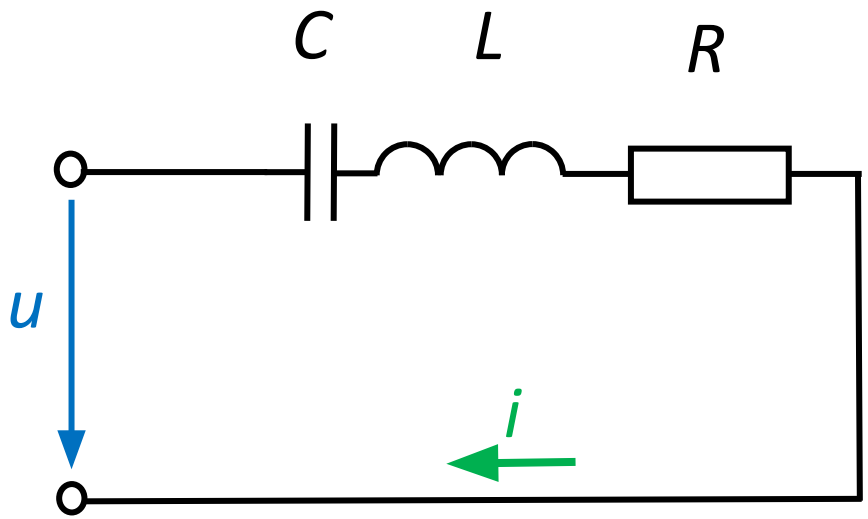
3. $i = 3{,}1 \sin(314t+ 3\pi /4)$

4. $i = 3{,}1 \sin 314t$



Какое из приведенных выражений содержит ошибку?

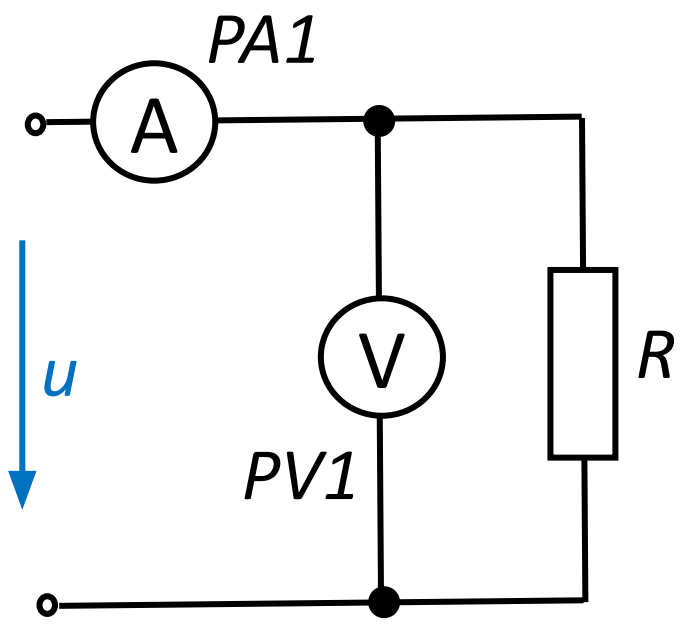
1. $X_C = 2\pi f C$
2. $X_L = 2\pi f L$
3. $Z = \sqrt{R^2 + (X_L - X_C)^2}$
4. $\cos\phi = R / Z$
5. $\omega = 2\pi / T$



$u = 100\sin 314t$, $R = 100$ Ом.

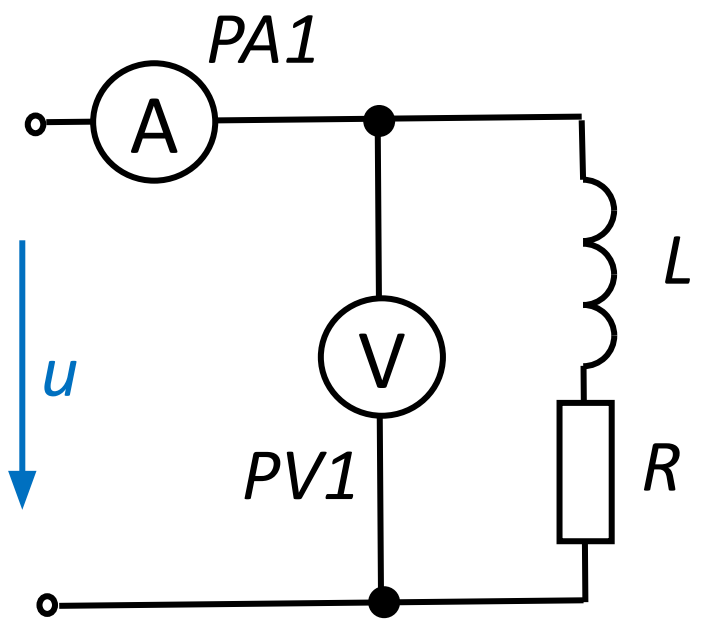
Каковы показания амперметра *PA1* и вольтметра *PV1*?

1. $I = 0{,}7$ А $U = 70$ В
2. $I = 0{,}7$ А $U = 100$ В
3. $I = 1$ А $U = 70$ В
4. $I = 1$ А $U = 100$ В

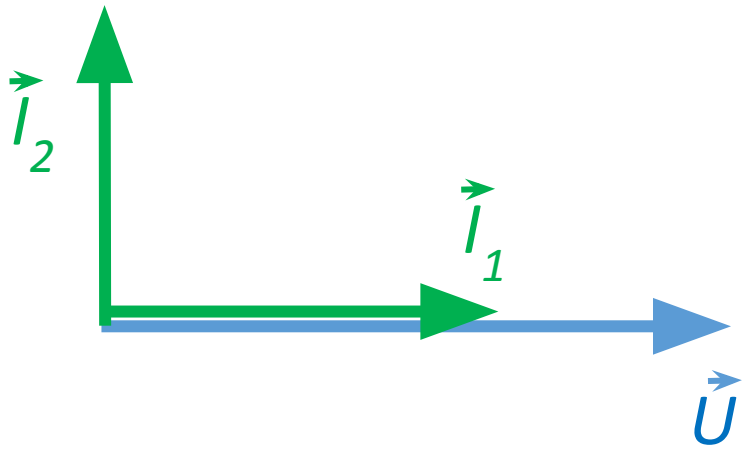


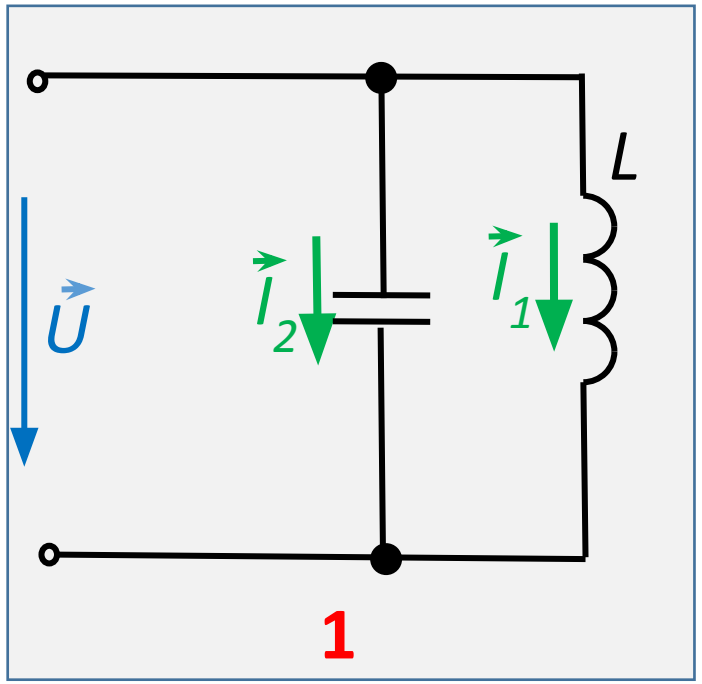
PA1 = 4 А, PV1 = 200 В, L = 0,096 Гн, f = 50 Гц.
Каково значение *R*? Чему равна активная мощность цепи?

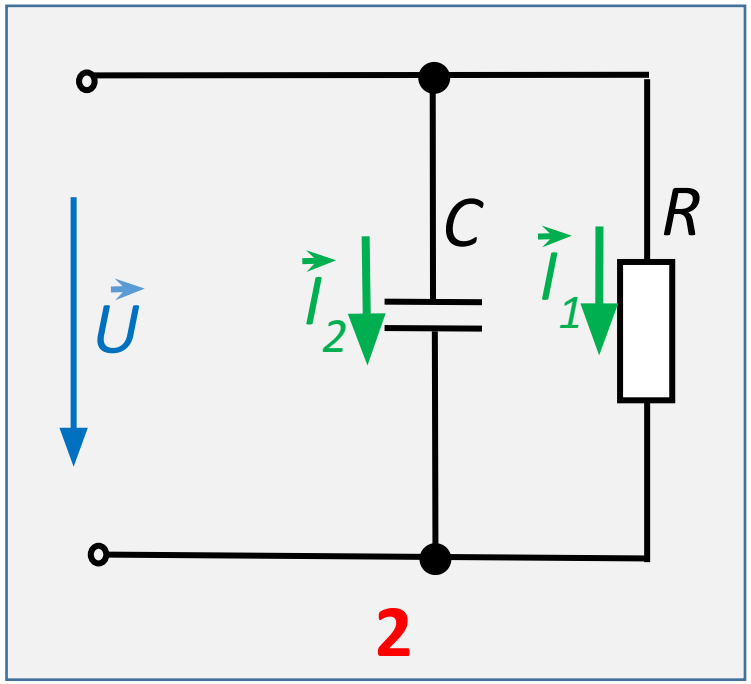
1. *R = 40 Ом* *P = 640 Вт*
2. *R = 20 Ом* *P = 320 Вт*
3. *R = 50 Ом* *P = 800 Вт*
4. *R = 80 Ом* *P = 1280 Вт*

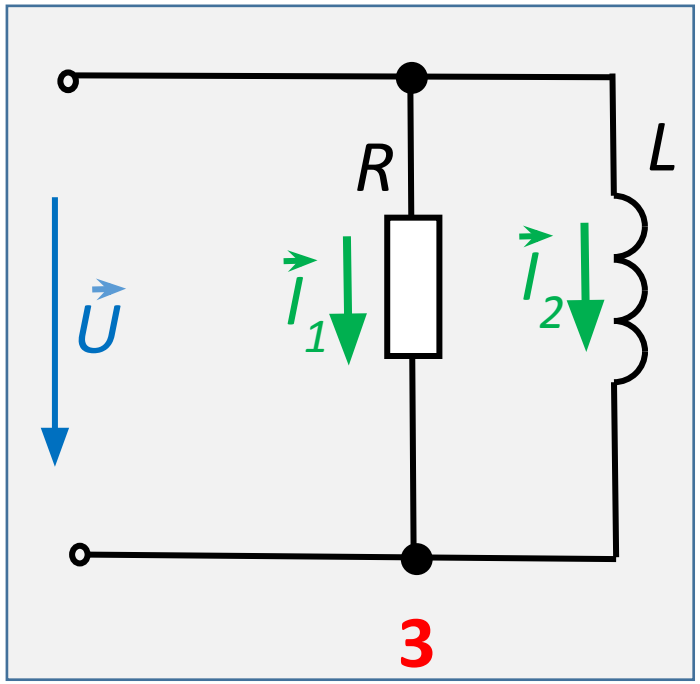


Какой цепи соответствует векторная диаграмма?









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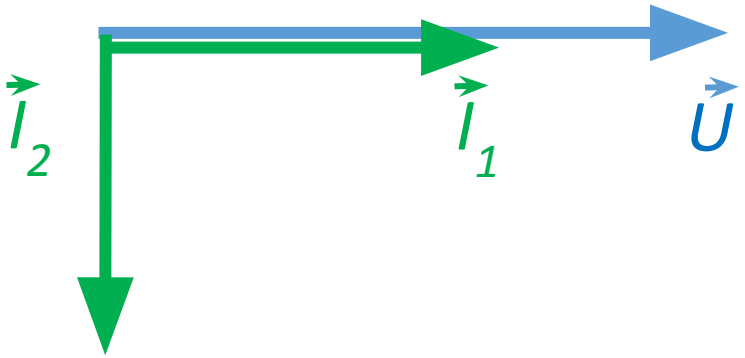

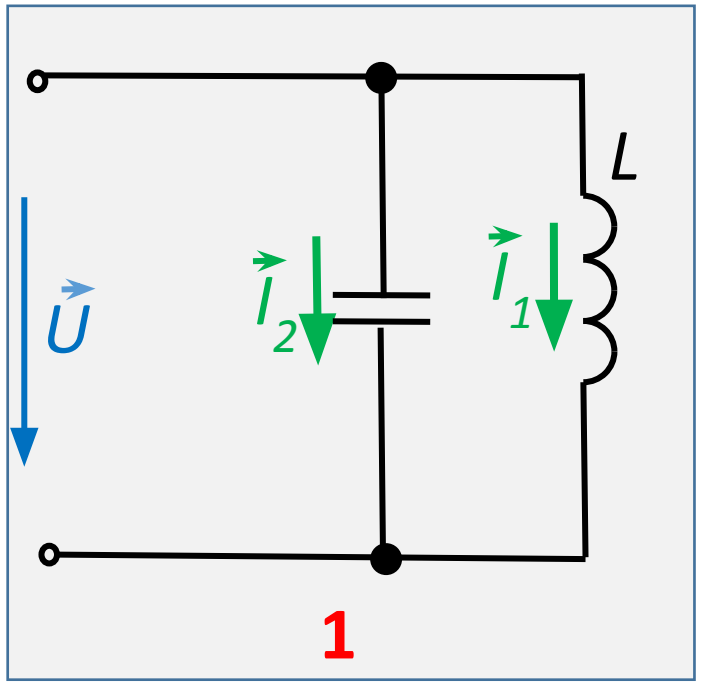

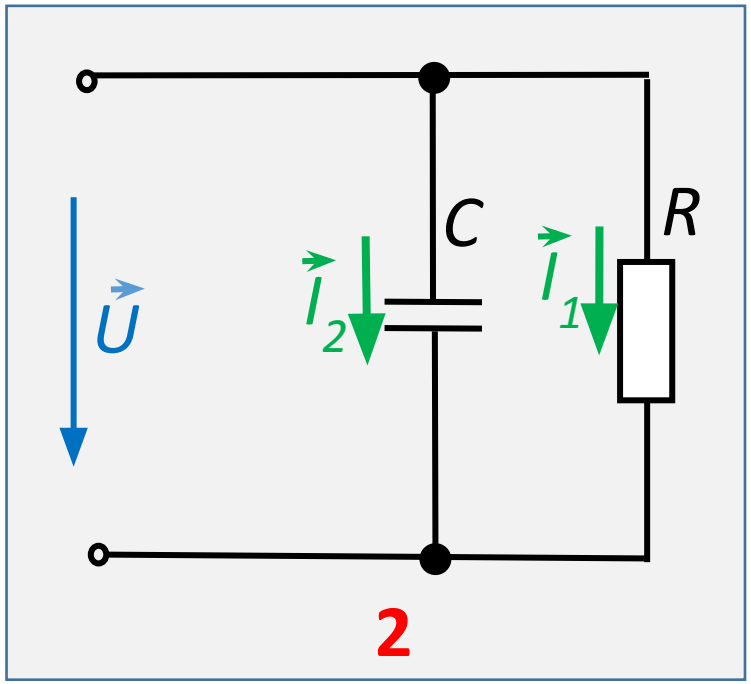

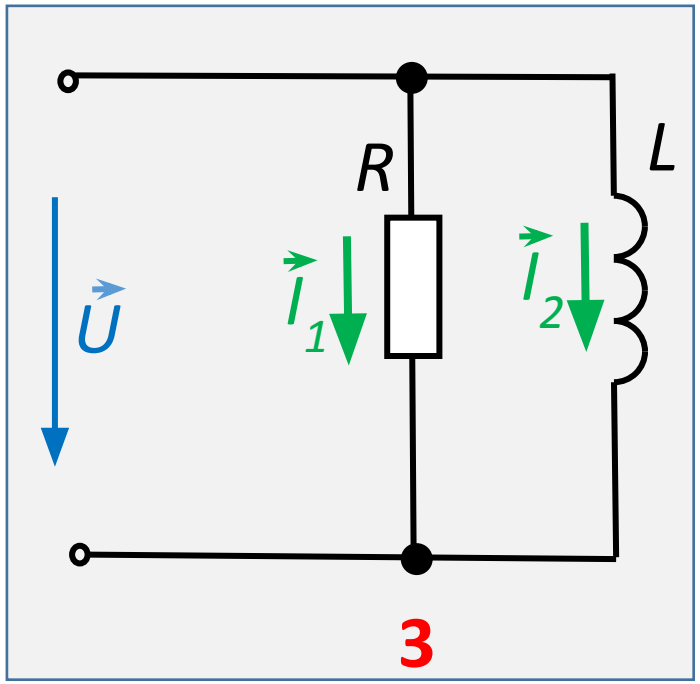

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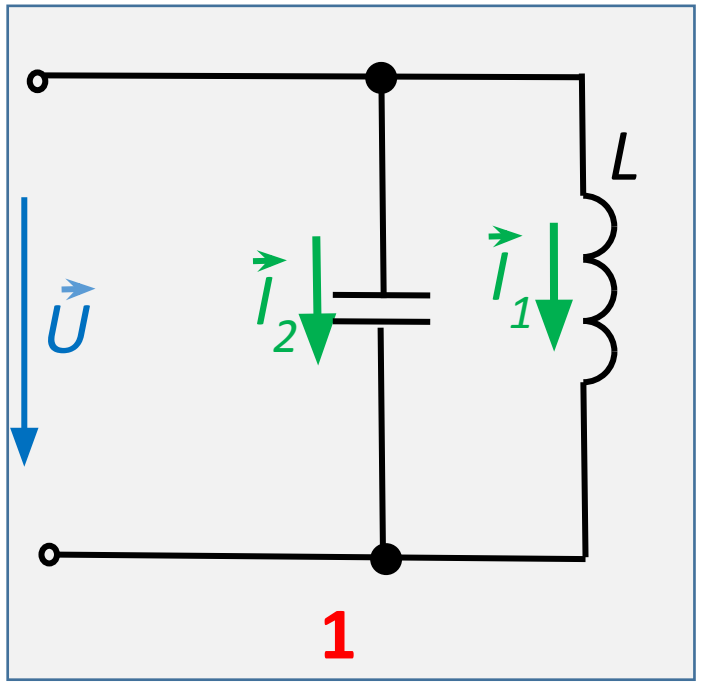
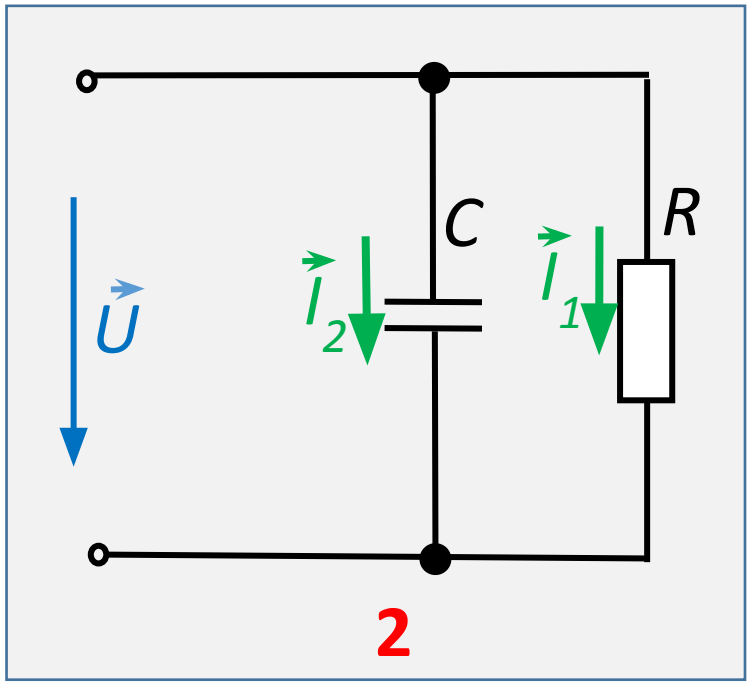
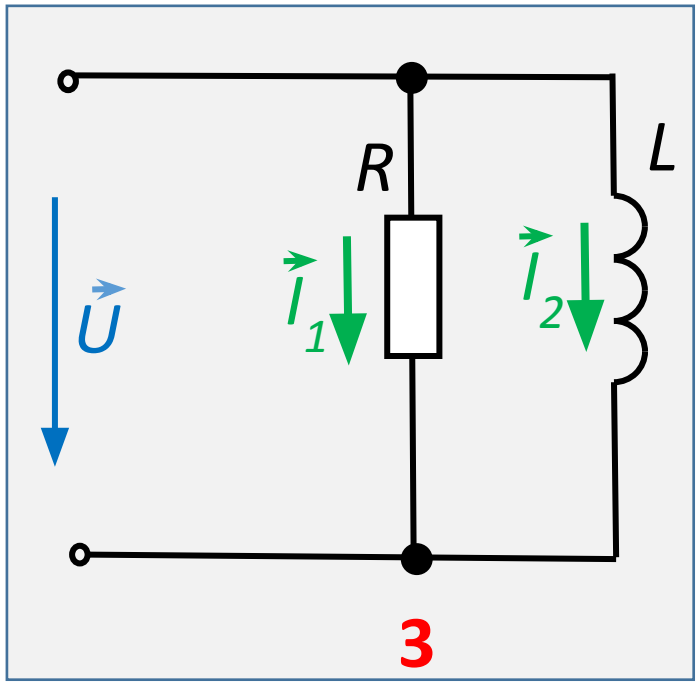
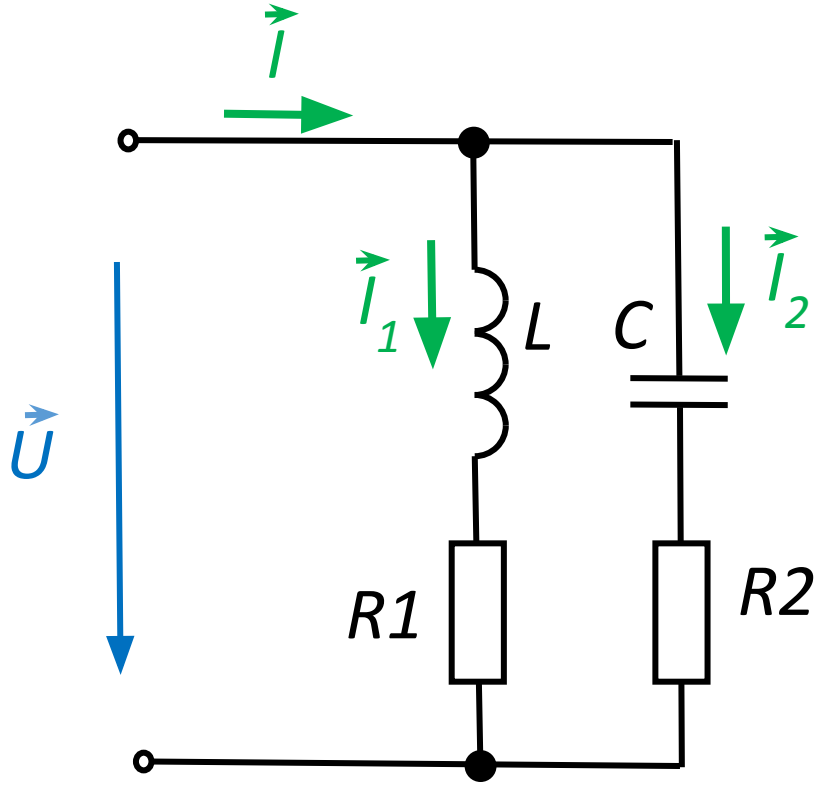




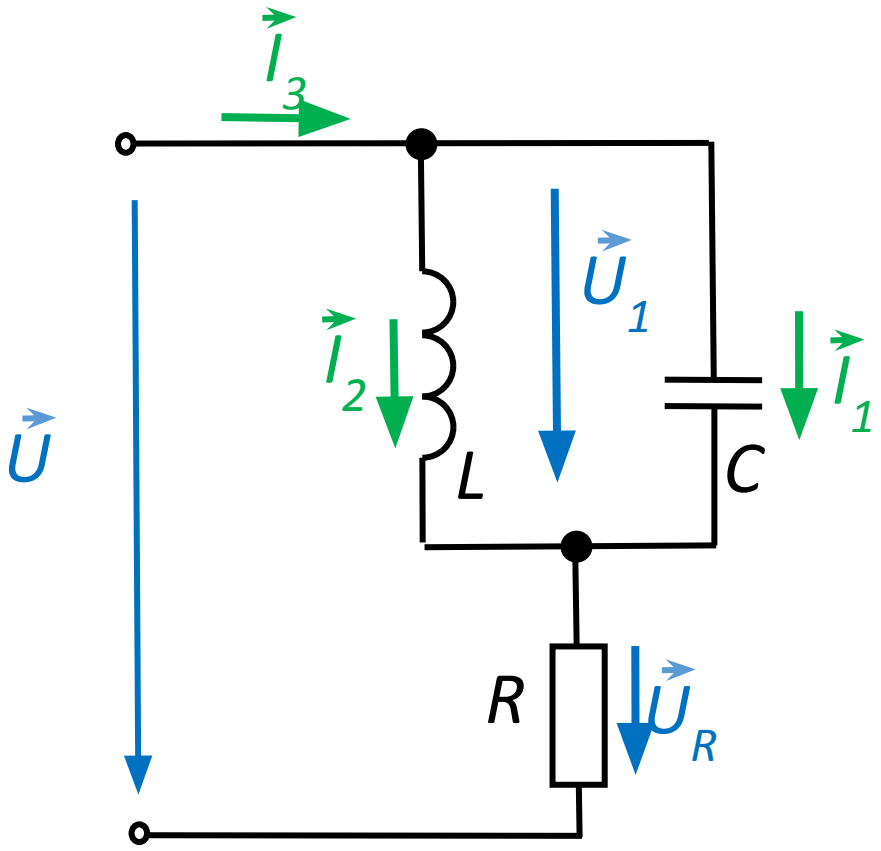


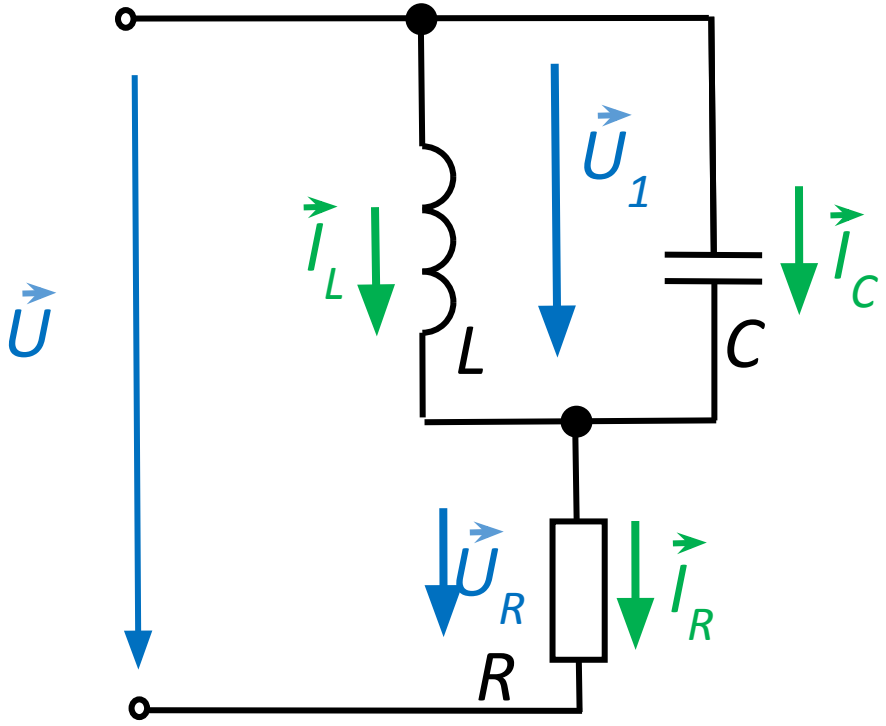
В цепи – резонанс токов. Построить векторную диаграмму



В цепи – резонанс токов. $U = 380$ В, $R = 100$ Ом, $X_C = 38$ Ом.

U_1 -? U_R -? I_1 -? I_2 -? I_3 -?



$U = 200$ В, $R = 10$ Ом, $X_C = X_L = 20$ Ом.

U_1 -? U_R -? I_C -? I_L -? I_R -?