

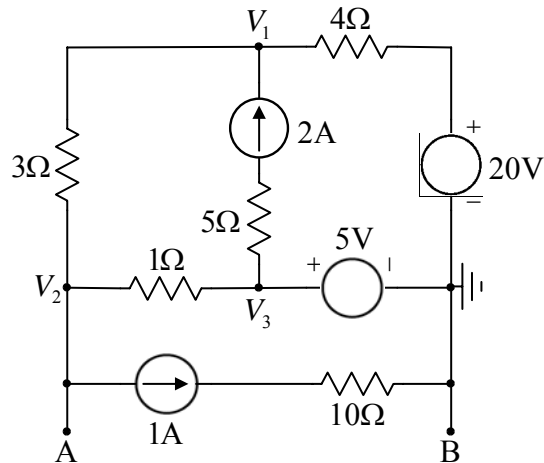
# Osnovi elektronike SI

## Rešenja zadatka – jun 2009.

### I Deo

#### 2. zadatak

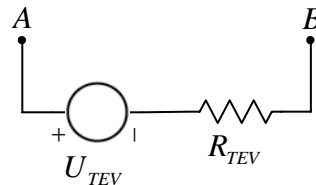
a)



$$V_1 = 16 \text{ V}; \quad V_2 = 7 \text{ V}; \quad V_3 = 5 \text{ V};$$

b)  $U_{TEV} = 7 \text{ V};$

$$R_{TEV} = \frac{7}{8} \Omega;$$



### II Deo

#### 2. zadatak

$$\underline{I_X}' = \underline{I_X} (za \underline{I_1} = 0) = \frac{1-j}{2};$$

$$\underline{I_X}'' = \underline{I_X} (za \underline{U_1} = 0) = -1-j$$

$$\underline{I_X} = \underline{I_X}' + \underline{I_X}'' = \frac{-1-j3}{2};$$

$$i_x(t) = \sqrt{5} A \cos(\omega t + 198,4^\circ);$$

$$\underline{S} = \frac{5}{2} + j5;$$

$$P = \frac{5}{2} \text{ W};$$

$$Q = 5 \text{ VAR};$$

### III Deo

#### 2. zadatak

$$v_I = v_G + R_1 I_0$$