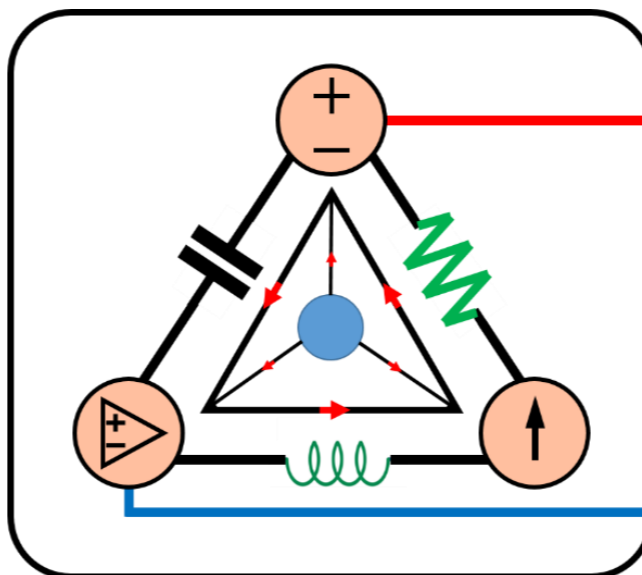


## 5-Mavzu: Operatsion kuchaytirgichlar.

(Lecture-5: Operational Amplifiers)

### 5-Mavzusi bo‘ycha tekshirish uchun savollarning javobi

*(Test answers of the Lecture-5)*



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# TEKSHIRISH UCHUN SAVOLLAR!

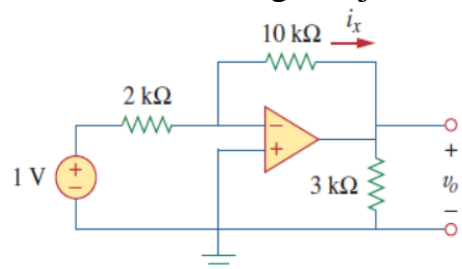
5.1. Operatsion kuchaytirgichning ikkita kirish terminali quyidagicha nomlanadi:

- A) yuqori va past.                      B) ijobiy va salbiy.  
 C) teskati (*inverting*) va to'g'ri (*noninverting*).  
 D) differensial va differensial bo'lmagan.

5.2. Ideal operatsion kuchaytirgich uchun quyidagi fikrlardan qaysi biri to'g'ri emas?

- A) kirish terminallaridagi differensial kuchlanish nolga teng.  
 B) kirish terminallaridagi tok kuchi nolga teng.  
 C) chiqish terminalidagi tok kuchi nolga teng, kirish qarshiligi nolga teng.  
 D) chiqish qarshiligi nolga teng.

5.3. 5.24-rasmdagi zanjir uchun chiqish kuchlanishi  $u_o$  qanday qiymatga teng?

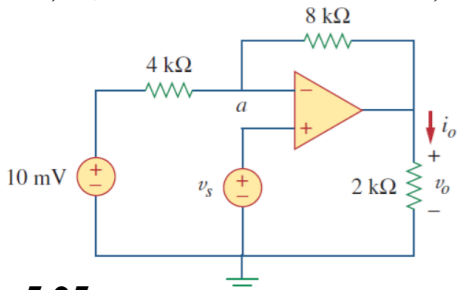


5.24-rasm.

- A) -6 V.  
 B) -5 V  
 C) -1,2 V  
 D) -0,2 V.

5.4. 5.24-rasmdagi zanjir uchun tok kuchi  $i_x$  qanday qiymatga teng?

- A) 0,6 mA.                      B) 0,5 mA.                      C) 0,2 mA.                      D) 1/12 mA.



5.25-rasm.

5.5. 5.25-rasmdagi zanjir uchun  $u_s = 0$  bo'lsa, tok kuchi  $i_o$  qanday qiymatga teng?

- A) -10 mA.                      B) -2,5 mA.  
 C) 10/12 mA.                      D) 10/14 mA.

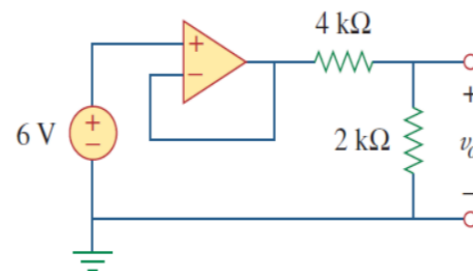
5.6. 5.25-rasmdagi zanjir uchun  $u_s = 8 mV$  bo'lsa, chiqish kuchlanishi  $u_o$  qanday qiymatga teng?

- A) -44 mV.                      B) -8 mV.                      C) 4 mV.                      D) 7 mV.

5.7. 5.25-rasmdagi zanjir uchun  $u_s = 8 mV$  bo'lsa, kirish kuchlanishi  $u_a$  qanday qiymatga teng?

- A) -8 mV.                      B) 0 mV.                      C) 10/3 mV.                      D) 8 mV.

5.8. 5.26-rasmdagi zanjirda 4 kΩ rezistor tomonidan sarflanayotgan quvvat qanday qiymatga teng?



5.26-rasm.

- A) 9 mW.  
 B) 4 mW.  
 C) 2 mW.  
 D) 1 mW.

5.9. Ushbu kuchaytirgichlardan qaysi biri raqamli-analogli konvertorda ishlatiladi?

- A) to'g'ri (*noninverter*).                      B) kuchlanish takrorlagichi (*voltage follower*).  
 C) umumlashtiruvchi (*summer*).                      D) farqlovchi kuchaytirgich (*difference amplifier*).

5.10. Farq kuchaytirgichlari quyidagi hollarda qo'llaniladi (*iltimos, amaldagilarning barchasini tekshiring*):

- A) asboblari kuchaytirgichlari, kuchaytirgichlarni ayirish.  
 B) kuchlanish takrorlagichlari.  
 C) kuchlanish regulyatorlari.                      D) buferlar, jamlovchi kuchaytirgichlar.

# TEST JAVOBLARI

*Javoblar: 5.1c, 5.2c, 5.3b, 5.4b, 5.5a, 5.6c, 5.7d, 5.8b, 5.9c, 5.10a.*

Savollar	1	2	3	4	5	6	7	8	9	10
Javoblar (talabaning javoblari)										
To‘g‘ri javob	C	C	B	B	A	C	D	B	C	A
*To‘g‘ri javobga – 1, *Noto‘g‘ri javobga – 0. $\Sigma =$										

**\*Izoh:** Talaba to‘g‘ri va noto‘g‘ri javoblarga qo‘ygan **1** av **0** sonlarini yig‘indisini hisoblaydi. Hosil bo‘lgan qiymatni quyidagi shkala bo‘yicha solishtirib, mavzuni o‘zlashtirish darajasini bilib olishi mumkin.

**Natija** Qoniqarli va Qoniqarsiz chiqsa, mavzuni qayta o‘rganishi tavsiya etiladi!!!

“A‘lo”: 10-9 \_\_\_\_\_

“Yaxshi”: 7-8 \_\_\_\_\_

“Qoniqarli”: 5-6 \_\_\_\_\_

“Qoniqarsiz”: 0-4 \_\_\_\_\_