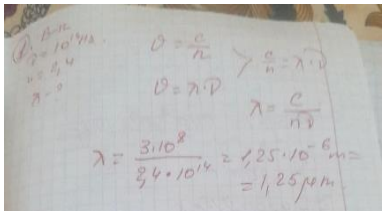
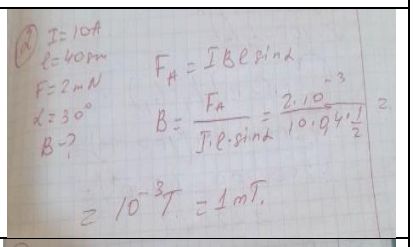
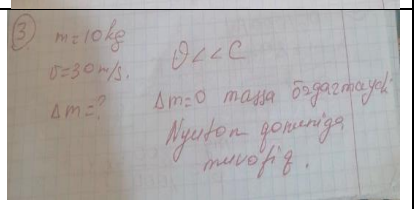
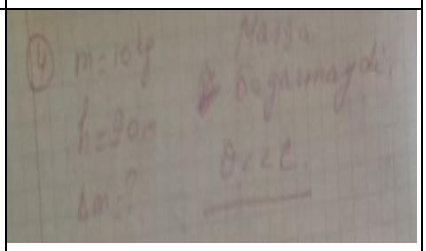
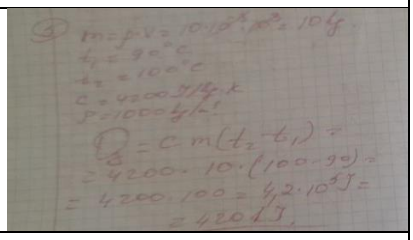
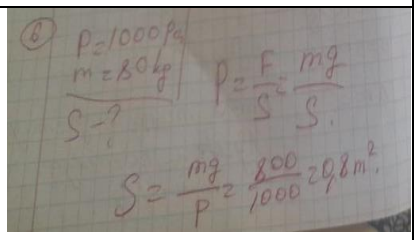
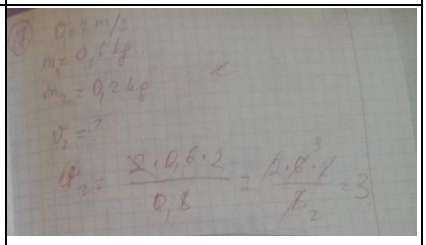
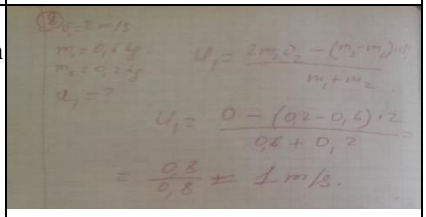
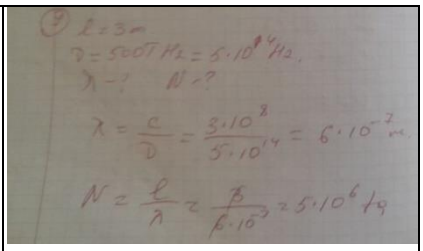
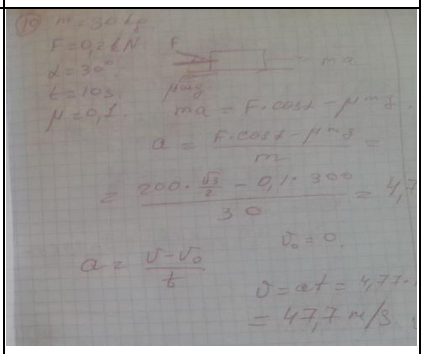
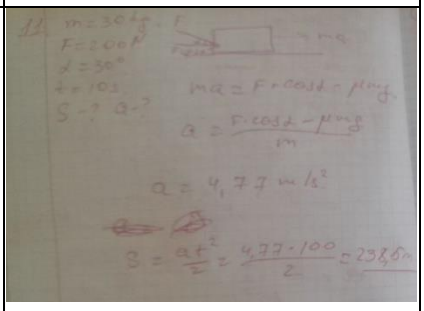
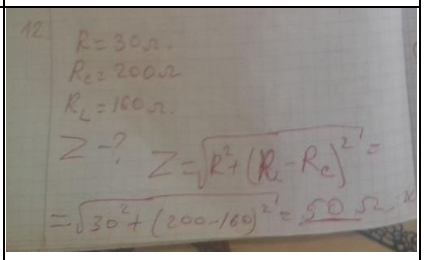
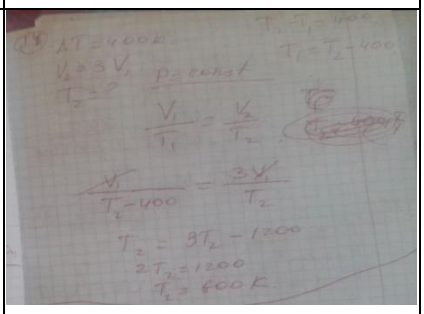
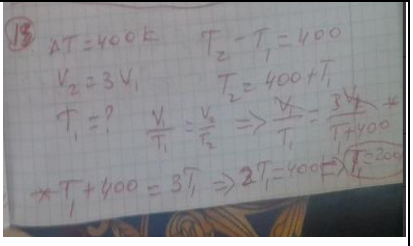
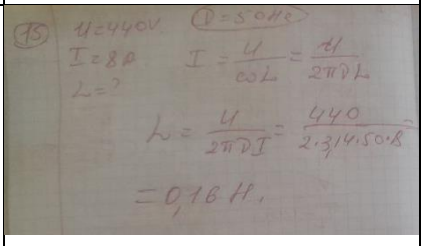
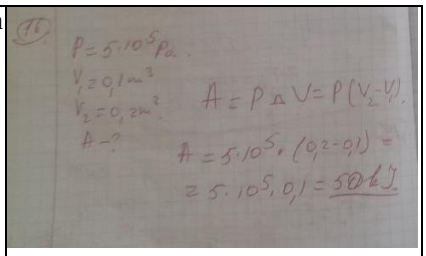
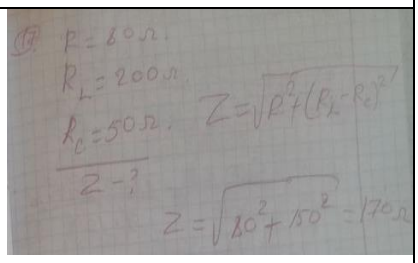
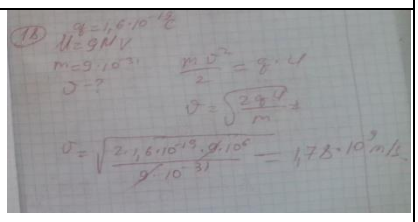
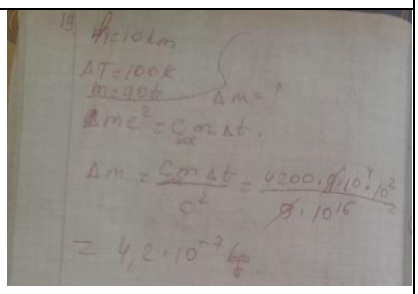
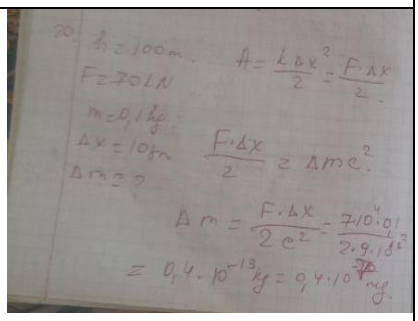
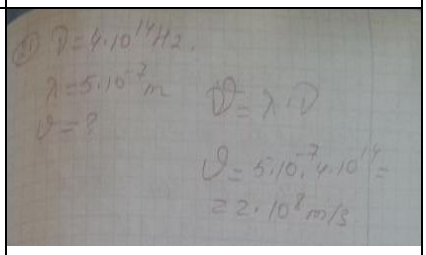
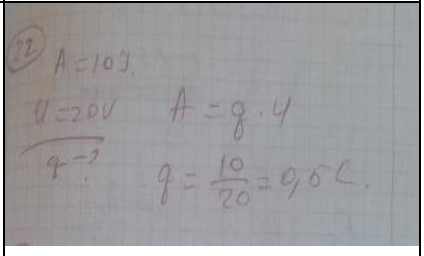
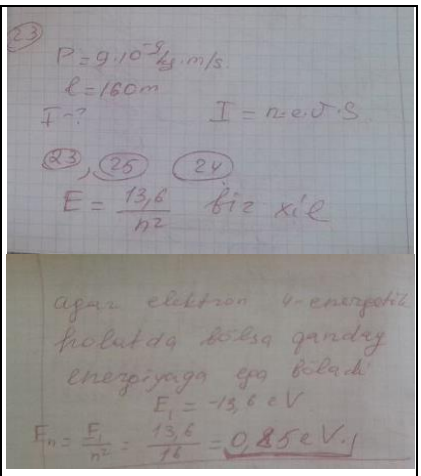
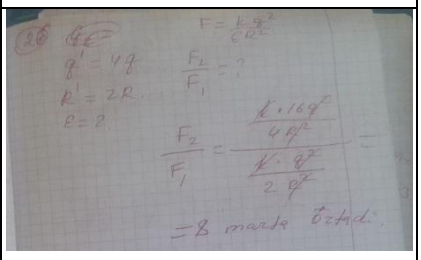
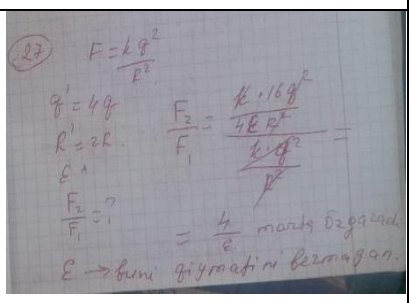
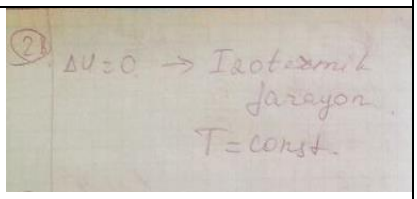
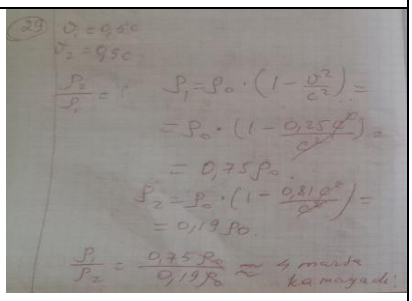
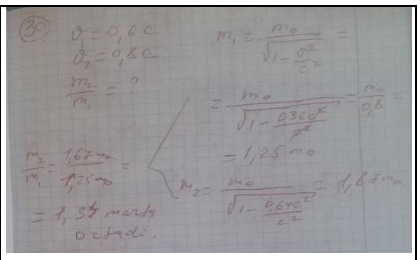
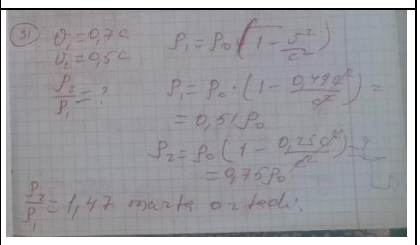
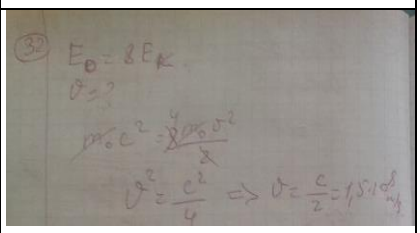
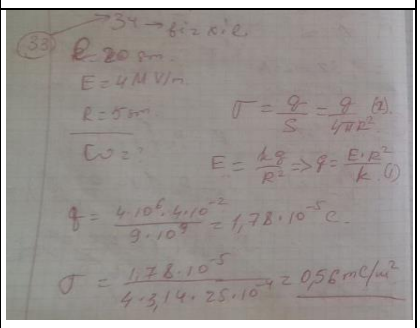
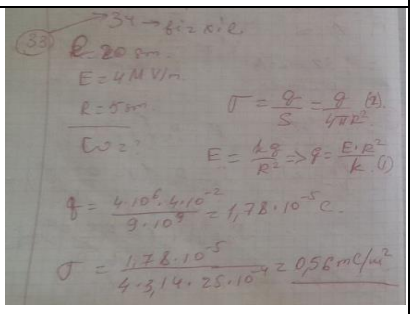
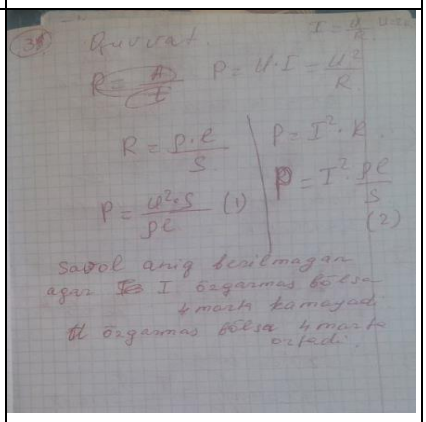
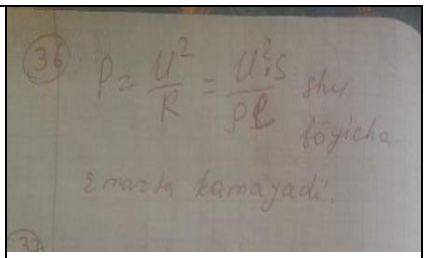
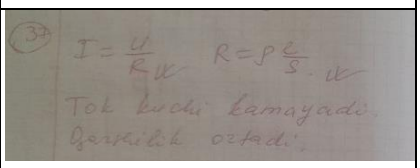
№	Savollar	Javoblar
1.	Yorug'lik nurining tebranishlari chastotasi 10^{14}Gz ga teng. Shu nurning absolyut sindirish ko'satkichi 2,4 teng bolgan olmosdagi to'lqin uzunligini (m) aniqlang.	
2.	10 A tok o'tayotgan uzunligi 40 sm li o'tkazgich magnit maydonida turibdi. Unga ta'sir etayotgan kuch 2 mNga teng. Tok yo'nalishi bilan magnit induksiyasi vektori orasidasi burchak 30°. Magnit maydon induksiyasini (mVb) aniqlang.	
3.	10 kg li tinch turgan jismning massasi u 30 m/s tezlik olganda qanchaga (kg) o'zgaradi?	
4.	10 kg li tinch turgan jismning massasi u 90 m balandlikka ko'tarilganda qanchaga (kg) o'zgaradi?	
5.	10 l suvni 90°C dan qaynash temperaturasigacha isitish uchun qancha issiqlik miqdori (MJ) kerak? Suvning solishtirma issiqlik sig'imi 4200 J/kg·K, zichligi 1000 kg/m^3.	
6.	10 W – quvvatda	
7.	1000 Pa bosim xosil qilayotgan 80 kg massali jismning tayanch yuzasini (m^2) aniqlang.	
8.	2 m/s tezlikda harakatlanayotgan 600 g massali jism tinch turgan 200 g massali jism bilan to'qnashdi. Agar to'qnashuv markaziy va absolyut elastik bo'lsa, to'qnashuvdan keyin ikkinchi jismning tezligi qanday (m/s)bo'ladi?	
9.	2 m/s tezlikda harakatlanayotgan 600 g massali jism tinch turgan 200 g massali jism bilan to'qnashdi. Agarto'qnashuv markaziy va absolyut elastik bo'lsa, to'qnashuvdan keyin birinchi jismning tezligi qanday (m/s) bo'ladi?	

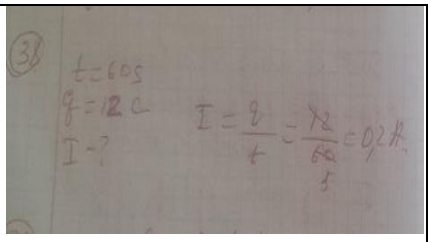
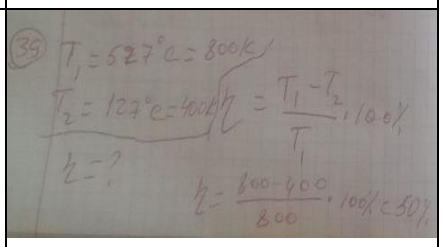
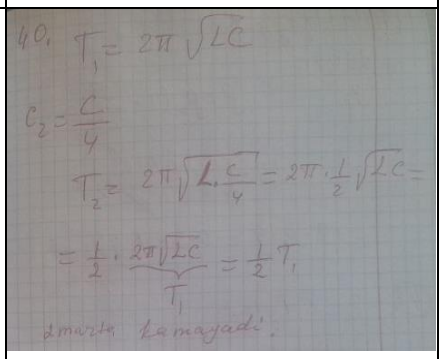
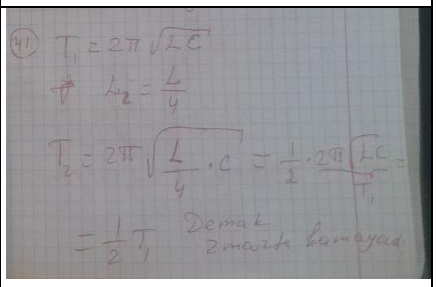
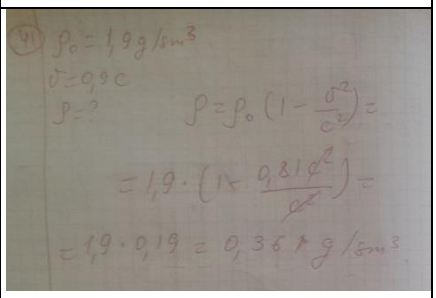
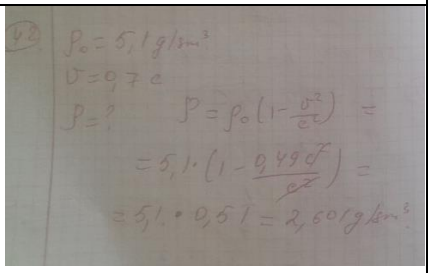
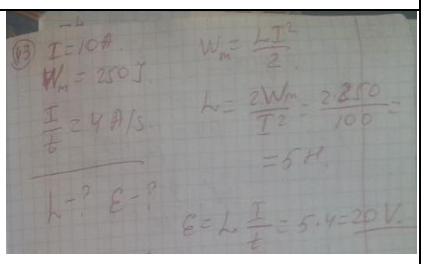
10.	3 m li kesmaga chastotasi 500 TGz bo'lgan monoxromatik yorug'lik to'lqin uzunligidan nechtasi joylashadi?	
11.	30 kg massali jismga 0,2 kN kuch gorizontga nisbatan 30° burchak ostida ta'sir qilmoqda. Jismning ta'sirboshlanishidan 10 s o'tgandan keyingi tezligini (m/s) toping. Ishqalanish koeffitsiyenti 0,1 .	
12.	30 kg massali jismga 0,2 kN kuch gorizontga nisbatan 30° burchak ostida ta'sir qilmoqda. Jismning ta'sirboshlanishidan 10 s ichida o'tgan yo'lini (m) toping.	
13.	30 Om li aktiv qarshilik, 200 Om li sig'im qarshilik va 160 Om li inluktiv qarshiliklar o'zgaruvchan tokmanbaiga ketma-ket ulandi. Zanjirning umumiy qarshiligini (Om) xisoblang.	
14.	400 K ga izobarik qizdirilganda ideal gazning hajmi 3 marta oshdi. Gazning boshlang'ich temperaturasuni (K)aniqlang.	
15.	400 K ga izobarik qizdirilganda ideal gazning hajmi 3 marta oshdi. Gazning oxirgi temperaturasuni (K)aniqlang.	
16.	440 V kuchlanishda standart chastotali o'zgaruvchan tok zanjirida 8 A tok vujudga keladi. Agar zanjirgainduktiv g'altak ulangani ma'lum bo'lsa, uning induktivligi (mGn) aniqlansin.	

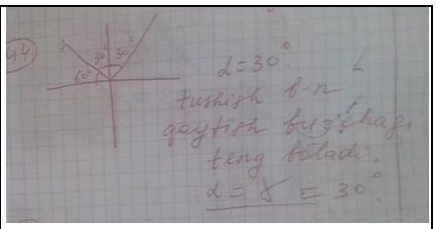
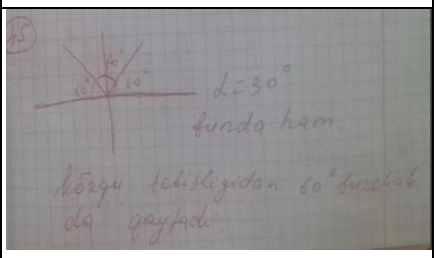
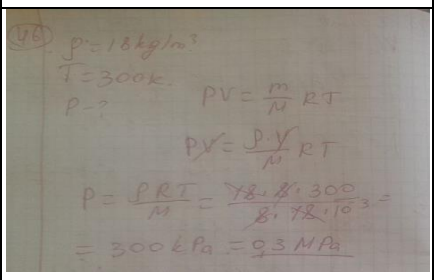
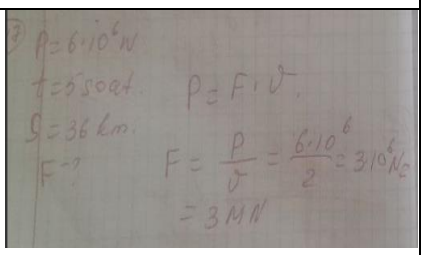
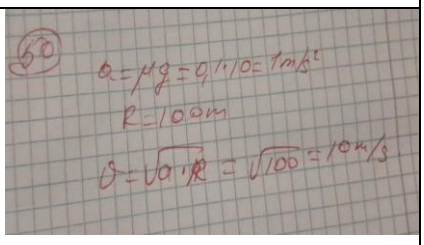
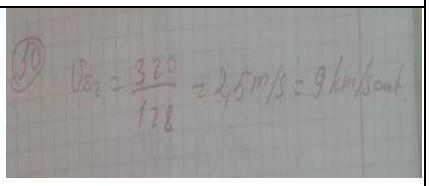
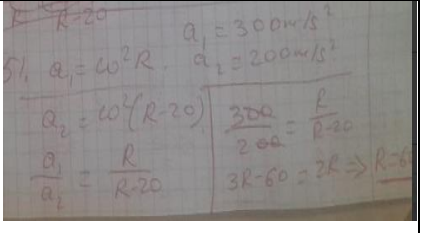
17.	$5\cdot10^5$ Pa bosim ostidagi gaz hajmi izobar ravishda $V_1 = 0{,}1\ m^3$ dan $V_2 = 0{,}2\ m^3$ gacha kengayganda qanday ish(kJ) bajaradi?	
18.	80 Om li aktiv qarshilik, 50 Om li sig'im qarshilik va 200 Om li inluktiv qarshiliklar o'zgaruvchan tokmanbaiga ketma-ket ulandi. Zanjirning umumiy qarshiligini (Om) xisoblang.	
19.	9 MV kuchlanishda ishlayotgan rentgen trubkasi elektrodi oldidagi elektronlarning tezligini (m/s) aniqlangElektron massasi $9\cdot10^{-31}$ kg.	
20.	Agar 10 km balandlikda temperaturasini 100 K ga oshirilsa, 90 T li suvning massasi qancha mg ga o'zgaradi? Suvning solishtirma issiqlik sig'imi 4200 J/kg·K	
21.	Agar 100m balandlikda qattiqligi 70 kN bo'lgan 100 grammli prujinani 10 sm siqilsa, uning massasi nechamilligrammga o'zgaradi?	
22.	Agar 400 TGz chastotada to'lqin uzunligi 500 nm bo'lsa, yorug'likning muxitdagi tezligini toping.	
23.	Agar bajarilgan ish 10 J bo'lsa, 20 V kuchlanishda o'tkazgichdan qancha miqdor zaryad oqib o'tadi?	

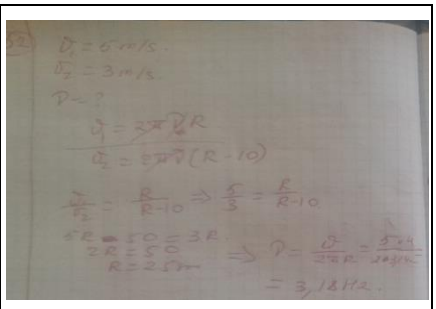
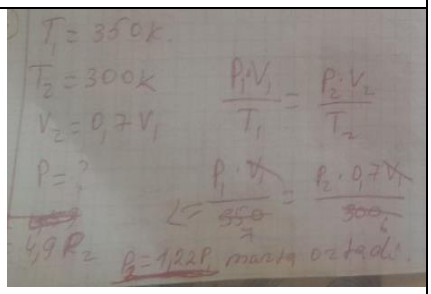
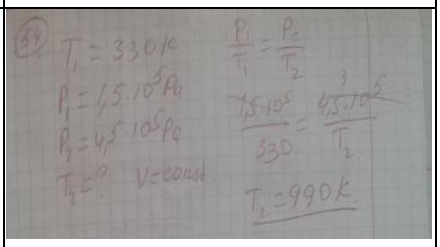
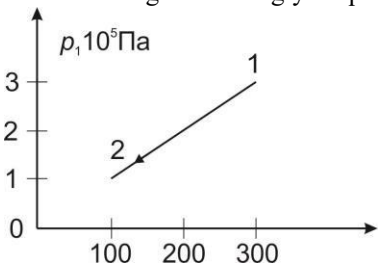
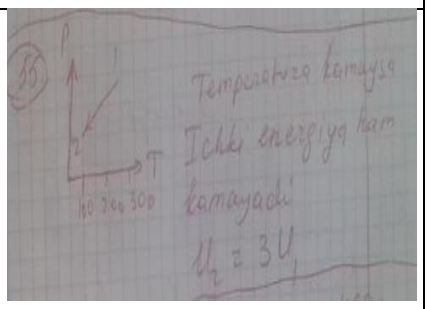
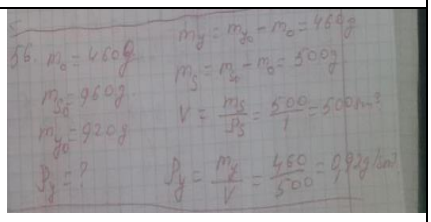
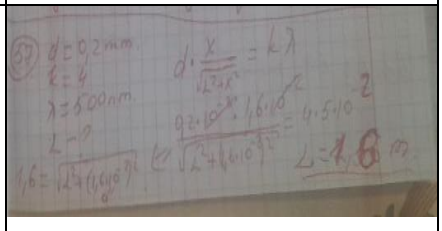
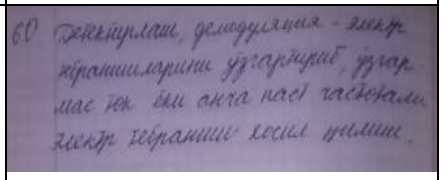
24.	Agar elektron 4- energetik holatda bo'lsa, vodorod atomi qanday energiyaga (eV) ega bo'ladi? $E_1 = -13,6$ eV.	
25.	Agar elektron 5- energetik holatda bo'lsa, vodorod atomi qanday energiyaga (eV) ega bo'ladi? $E_1 = -13,6$ eV.	Agar elektron 5- energetik holatda bo'lsa, u vodorod atomidan 13,6 x 5 = 68,0 eV energiya yoki potensial energiya egasi bo'ladi. Vodorod atomi esa 0 eV energiyaga ega bo'ladi.
26.	Agar elektronlarning o'tkazgichdagi impul'slari yig'indisi $9 \cdot 10^{-9}$ kg·m/s ga teng bo'lsa, uzunligi 160 m bo'lgano'tkazgichdan oqib o'tuvchi tok kuchini (A) toping.	Javob: 2.304 μA.
27.	Agar har qaysi zaryadni 4 marta, ular orasidagi masofani 2 marta oshirilsa va ularni dielektrik singdiruvchanligi ε = 2 bo'lgan muhitdan vakuumga olinsa, bu zaryadlar orasidagi o'zaro ta'sir kuchi qanday o'zgaradi?	
28.	Agar har qaysi zaryadni 4 marta, ular orasidagi masofani 4 marta oshirilsa va ularni vakuumdan dielektrik singdiruvchanligi ε bo'lgan muhitga olinsa, bu zaryadlar orasidagi o'zaro ta'sir kuchi qanday o'zgaradi?	
29.	Agar ideal gaz ichki energiyasining o'zgarishi nolga teng bo'lsa, u bilan qanday jarayon yuz bergan?	
30.	Agar jism tezligini 0,5c dan 0,9c gacha o'zgartirsa, uning zichligi necha marta o'zgaradi? c - yorug'lik tezligi.	

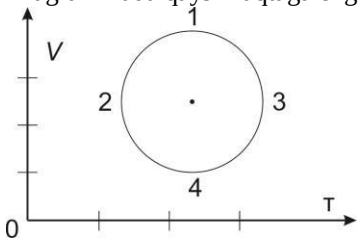
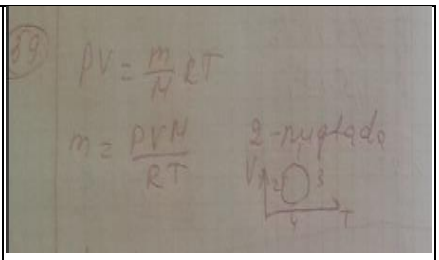
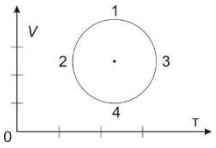
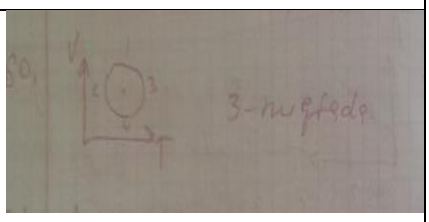
31.	Agar jism tezligini 0,6c dan 0,8c gacha o’zgartirsa, uning massasi necha foizga o’zgaradi?	
32.	Agar jism tezligini 0,7c dan 0,5c gacha o’zgartirsa, uning zichligi necha marta o’zgaradi? c - yorug’lik tezligi.	
33.	Agar jismning tinchlikdagi energiyasi kinetik energiyasidan 8 marta katta bo’lsa, uning tezligi qancha?	
34.	Agar maydon kuchlanganligi zaryadlangan shar markazidan 20 sm uzoqlikdagi nuqtada 4 MV/m bo’lsa, radiusi5 sm li o’tkazgich shar zaryadining sirt zichligini (mkKl/m^2) aniqlang.	
35.	Agar maydon kuchlanganligi zaryadlangan shar markazidan 20 sm uzoqlikdagi nuqtada 4 MV/m bo’lsa, radiusi5 sm li o’tkazgich shar zaryadining sirt zichligini (mkKl/m^2) aniqlang.	
36.	Agar o’tkazgich materiali bir xil bo’lgan o’sha uzunlikdagi ammo ko’ndalang kesim yuzasi 4 marta kattabo’lgan o’tkazgich bilan almashtirilsa, quvvat qanday o’zgaradi?	

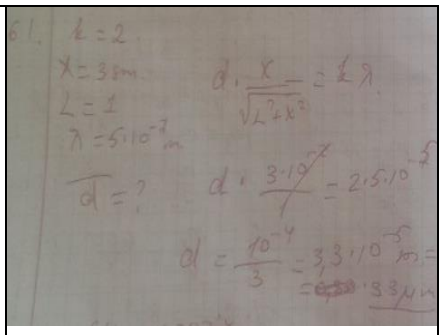
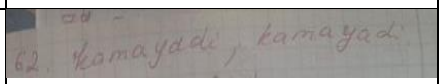
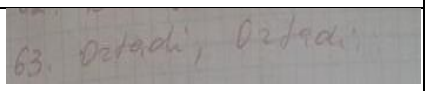
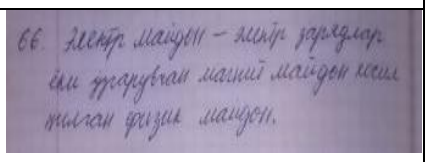
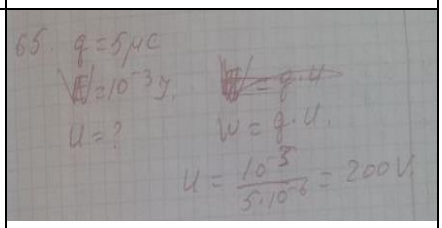
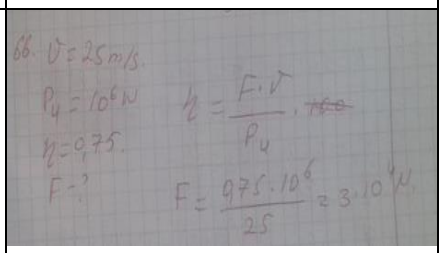
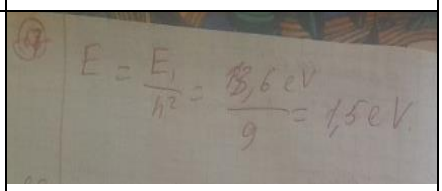
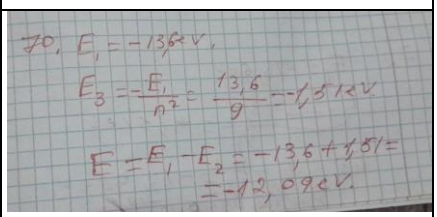
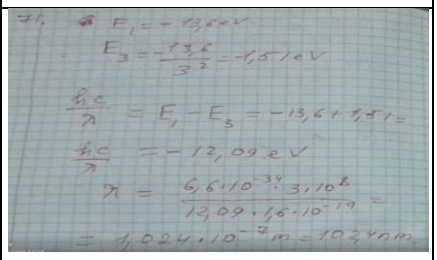
37.	Agar o’tkazgich solishtirma qarshiligi 2 marta katta bo’lgan materialdan tayyorlangan, ammo geometriko’lchamlari teng bo’lgan boshqa otkazgich bilan almashtirilsa, quvvat qanday o’zgaradi?	
38.	Agar o’tkazgich solishtirma qarshiligi katta bo’lgan materialdan tayyorlangan, ammo geometrik o’lchamlariteng bo’lgan boshqa otkazgich bilan almashtirilsa, tok kuchi va qarshilik qanday o’zgaradi?	

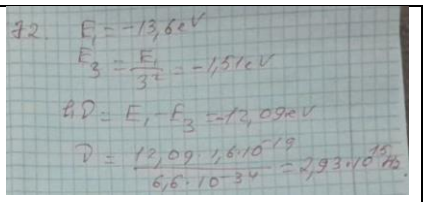
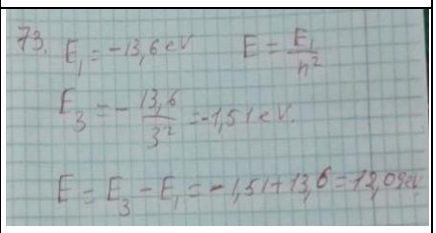
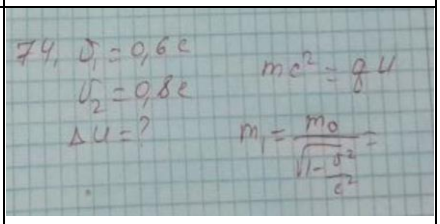
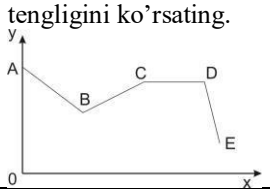
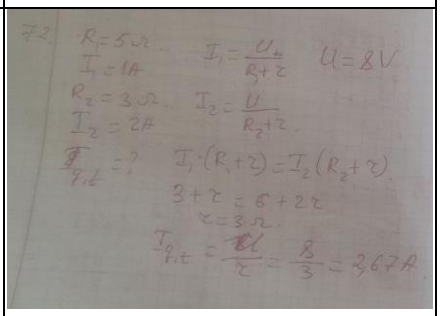
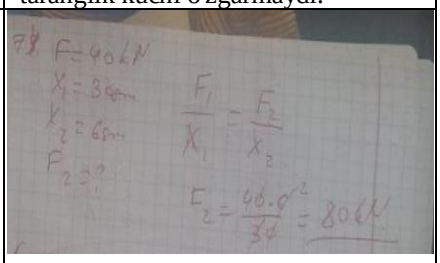
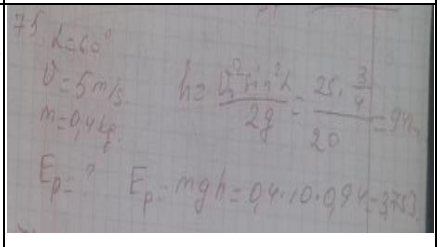
39.	Agar o’tkazgichdan 1 minutda 12 Kl zaryad o’tsa, undagi tok kuchini (A) toping.	
40.	Agar qaynoq bug’ 527°C temperaturada turbinaga kirib undan 127°C temperaturada chiqsa, turbinaning FIK ni(%) xisoblang.	
41.	Agar tebranishlar konturidagi C – sigimli kodensatorni C/4 – sigimli kondensatorga almashtirilsa, L –o’zgarmas, konturdagi xususiy elektromagnit tebranishlari davri qanday o’zgaradi?	
42.	Agar tebranishlar konturidagi L- induktivlilik galtakni L/4 – induktivlilikli galtakka almashtirilsa, C –o’zgarmas, konturdagi xususiy elektromagnit tebranishlari davri qanday o’zgaradi?	
43.	Agar tinchlikdagi zichligi 1,9 g/sm^3 bo’lsa, 0,9c tezlikda harakatlanayotgan jismning zichligini (g/sm^3)aniqlang. c - yorug’lik tezligi.	
44.	Agar tinchlikdagi zichligi 5,1 g/sm^3 bo’lsa, 0,7c tezlikda harakatlanayotgan jismning zichligini (g/sm^3)aniqlang. c - yorug’lik tezligi.	
45.	Agar tok kuchi 10 A bo’lganda g’altakdagi magnit maydon energiyasi 250 J bo’lsa, galtakda yuzaga kelgano’zinduksiya EYuKsining (V) modulini xisoblang. G’altakdagi tok kuchi 4 A/s tezlikda tekis oshmoqda.	

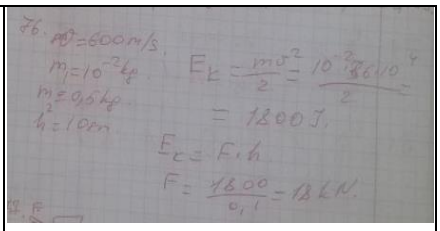
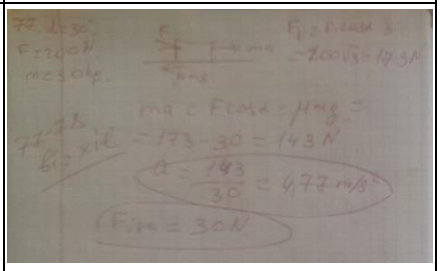
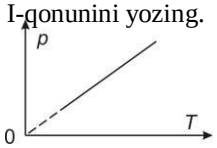
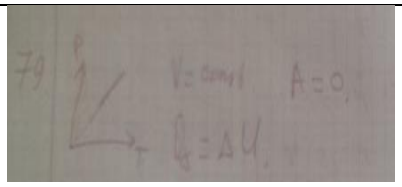
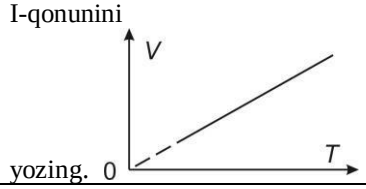
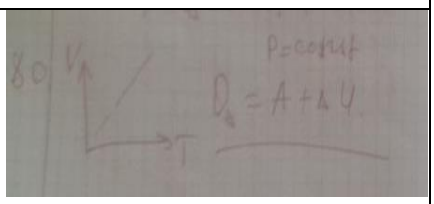
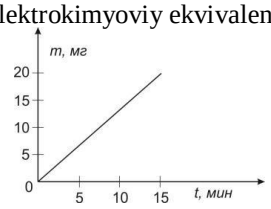
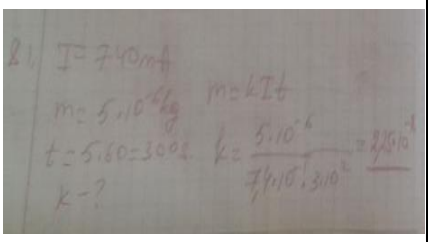
46.	Agar tushuvchi nur bilan ko'zgu orasidagi burchak 60° ga teng bo'lsa, nur ko'zgu tekisligan qanday burchakostida qaytadi?	
47.	Agar tushuvchi va qaytuvchi nurlar orasidagi burchak 60° ga teng bo'lsa, nur ko'zgu tekisligan qanday burchakostida qaytadi?	
48.	Agar zichligi 18 kg/m^3 bo'lsa, 27°C temperaturadagi suv bug'ining bosimini (MPa) aniglang. R=8 J/mol·K.	
49.	Atom muzyorar kemasi 6 MW quvvatga erishib, muzlikda 5 soar vaqt mobaynida 36 km masofani o'tdi.Muzyorar harakatiga bo'lgan o'rtacha qarshilik kuchini (MN) aniqlang.	
50.	Avtomobil 100 m radiusli burilishdan o'tmoqda. Agar sirpanish ishqalanish koeffitsiyenti 0,1 ga teng bo'lsa,burilishda sirg'anmaslik uchun avtomobil harakatini qanday tezlikkacha (km/soat) oshirishi mumkin?	
51.	Avtomobil 54 km/soat tezlikda harakatlanmoqda. Piyoda o'tish joyidan yo'lni 10 s da kesib o'tishi mumkin.Avtomobildan qanday minimal masofada (m) yo'lni kesib o'tish havfsiz.	
52.	Avtomobil qiyalik bo'ylab harakatlanib, 8 s da 80 m yo'lni o'tdi. Qiyalikdan tushib u yana 2 min da 240 myo'lni o'tib to'xtadi. Yo'lning barcha qismidagi o'rtacha tezlikni (km/soat) aniqlang.	Javob: 2.35 km/soat (to'g'ri yoki yolg'on deb anglatilgan emas, chunki soat va soniyalar orasidagi o'laroq farq bor).
53.	Aylanayotgan disk gardishidagi nuqtaning tezlanishi 300 m/s^2, aylanish o'qiga 20 sm yaqin joylashgannuqtaniki esa 200 m/s^2. Diskning radiusini (m) aniqlang.	

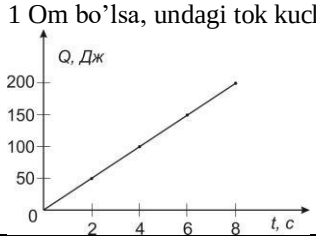
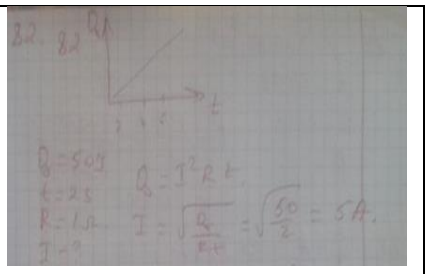
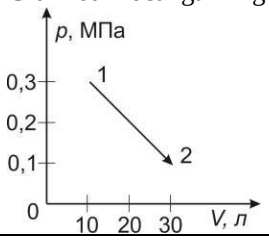
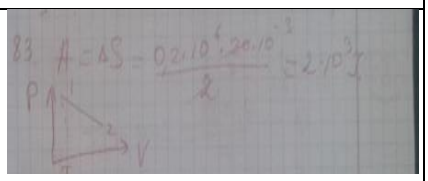
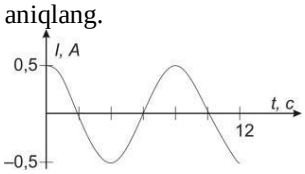
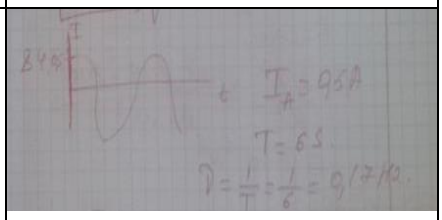
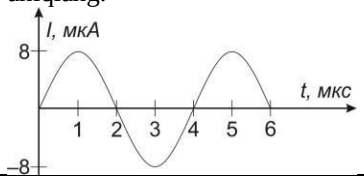
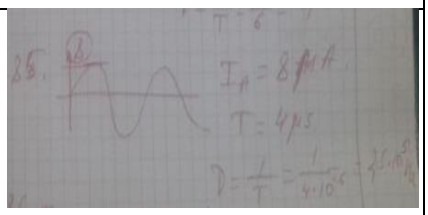
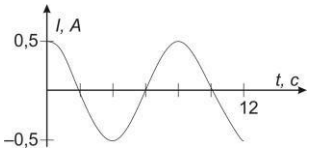
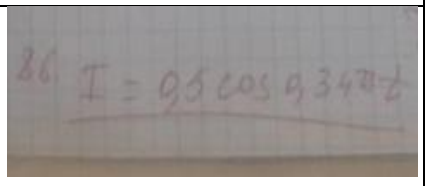
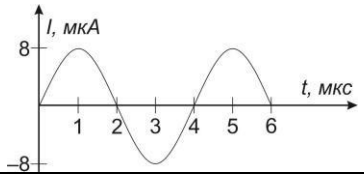
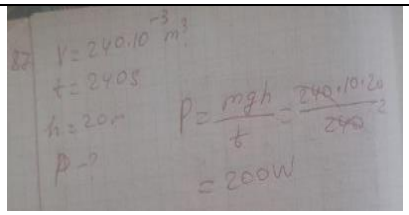
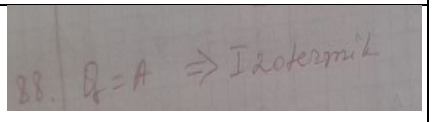
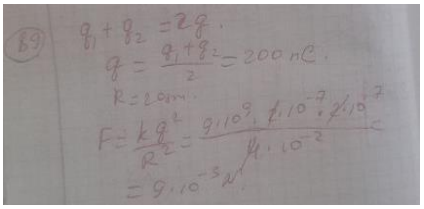
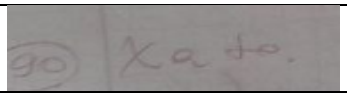
54.	Aylanayotgan disk gardishidagi nuqtaning tezligi 5 m/s, aylanish o'qiga 10 sm yaqin joylashgan nuqtaniki esa 3m/s. Diskning aylanish chastotasini (s^{-1}) aniqlang.	
55.	Ballonda temperaturasi 77°C bo'lgan gaz bor. Agar ballondan gazning 30 % ni chiqarib yuborilsa va bundagazning temperaturasi 50°C ga kamaysa, uning bosimi qanday o'zgaradi?	
56.	Ballondagi gaz bosimi 57°C temperaturada $1,5 \cdot 10^5$ Pa ga teng. Qanday temperaturada uning bosimi $4,5 \cdot 10^5$ Paga teng bo'ladi?	
57.	Bir atomli ideal gaz 1- holatdan 2- halatga chizmada ko'rsatilgandek o'tdi. Gazning ichki energiyasi qandayo'zgardi? 	
58.	Bo'sh butilkaning massasi 460 g. Agar unga suv to'ldirilsa massasi 960 g, kungaboqar yog'i bilan to'ldirilsa920 g bo'ladi. Shu berilganlardan foydalanib kungaboqar yog'ining zichligini (kg/m^3) aniqlang. Suvning zichligi 1 g/m^3.	
59.	Davri 0,2 mm ga teng bo'lgan difraksion panjaraning ekrandagi bosh maksimumi bilan 4- tartibdagi maksimumlari orasidagi masofa 1,6 sm ga teng. Agar yorug'likning to'lqin uzunligi 500 nm bo'lsa, panjaradan ekrangacha bo'lgan masofa necha sm?	
60.	Detektorlash - bu	

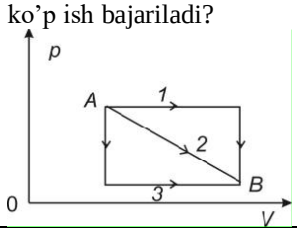
61.	Diagrammada qaysi nuqtaga eng katta massa to'g'ri keladi? 	
62.	Diagrammada qaysi nuqtaga eng kichik massa to'g'ri keladi? 	

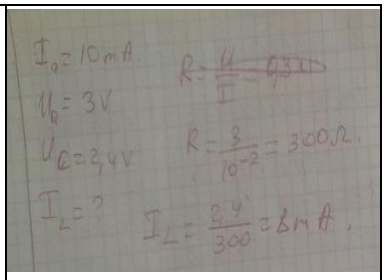
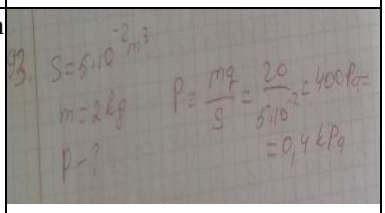
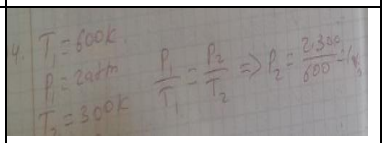
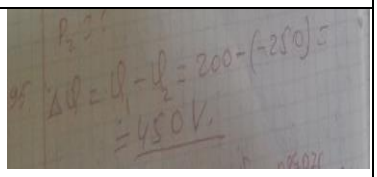
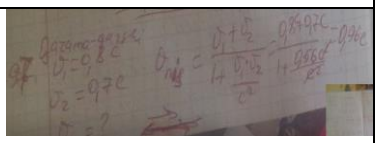
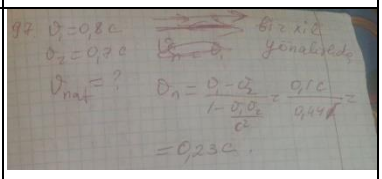
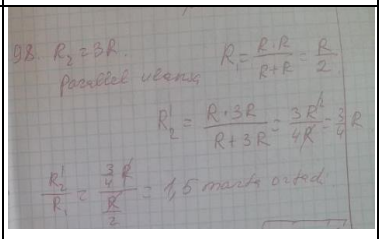
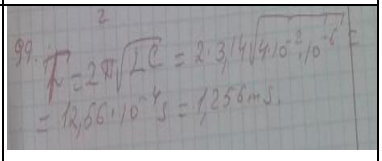
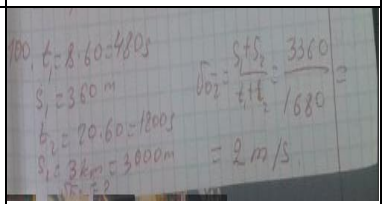
63.	Difraksion panjarada olingan ikkita ikkinchi tartibli maksimumlar orasidagi masofa 3sm.Difraksion panjaradanekrangacha masofa 1 m bo'lsa, panjara doimiysini aniqlang. Panjara to'lqin uzunligi 500 nm li yorug'lik bilan yoritilgan.	
64.	Difraksion panjarani ekranga yaqinlashtirilsa difraksion spektori maksimumlari orasidagi masofa va spektrkengligi qanday o'zgaradi?	
65.	Difraksion panjaraning davri oshirilsa difraksion spektori maksimumlari orasidagi masofa va spektr kengligiqanday o'zgaradi?	
66.	Elektr maydon tavsifi uchun to'g'ri tasdiqni tanlang:	
67.	Elektr maydonining qaysidir nuqtasidagi 5 mkKl nuqtaviy zaryad 1 mJ potensial energiyaga ega. Shu nuqtadagielektrostatik maydon potensialini (V) aniqlang.	
68.	Elektro poyezd 90 km/soat tezlikda harakatlanmoqda. Motorning quvvati 1 MW, FIKi esa 75 %. Uning tortishkuchini (kN) toping.	
69.	Elektromagnit to'lqin nurlanishlarining asosiy sharti bu …	
70.	Elektron 1- energetik satxdan 3- satxga o'tganda vodorod atomi nurlanishi energoyasi qanday o'zgaradi? $E_1 = -13,6$ eV.	
71.	Elektron 1- energetik satxdan 3- satxga o'tganda vodorod atomi nurlanishining to'lqin uzunligini (nm) aniqlang. $E_1 = -13,6$ eV.	

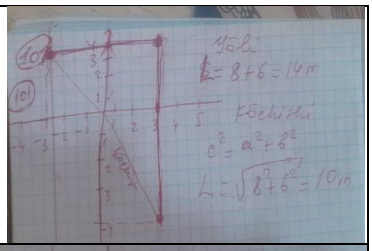
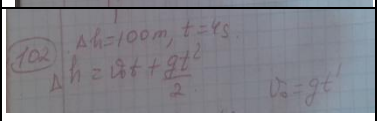
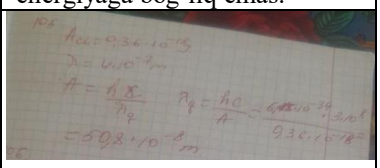
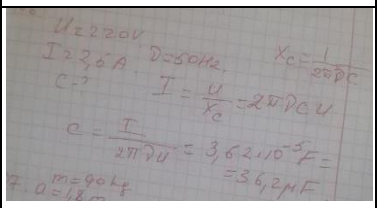
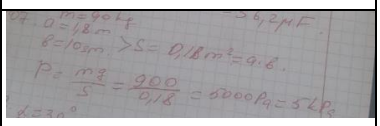
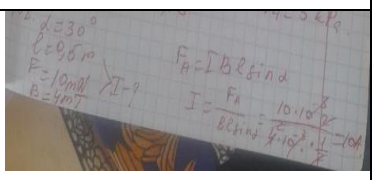
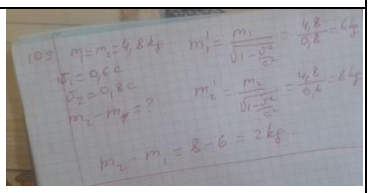
72.	Elektron 1- energetik satxdan 3- satxga o'tganda vodorod atomi nurlanishining chastotasini (Gz) aniqlang. E_1 = –13,6 eV.	
73.	Elektron 3- energetik satxdan 1- satxga o'tganda vodorod atomi nurlanishi energoyasi qanday o'zgaradi? $E_1 = -13,6$ eV.	
74.	Elektron o'z tezligini 0,6c dan 0,8c gacha o;zgartirdi. c-yorug'lik tezligi. Bu holda elektron o'tadigantezlantiruvchi potensiallar farqi qanday (MV) bo'lishi kerak?	
75.	Elektrostatik maydon potensiali bilan koordinatalar orasidagi bog'lanish grafigidan bog'lanishning qaysiqismida maydon kuchlanganligi nolga tengligini ko'rsating. 	Shunday qilib, bog'lanish grafigining "sadda" va "harmonik" nuqtalari orasidagi qismida maydon kuchlanishining nolga tengligini ko'rsatish mumkin.
76.	Elementga 5 Om li qarshilik ulanganda zanjirdagi tok 1 A, 3 Om da esa 2 A tok bo'lsa, qisqa tutashuv tokini (A) toping.	
77.	Fazoda natijaviy tebranishlarni qo'shilishiga…	Bu masalada, fazoda natijaviy tebranishlar qo'shilishiga to'g'ri kelmaydi, chunki sharcha yuqori tezlikda harakatlanmaydi va uning bosimi o'zgarishsiz qoladi. Shunchaki, sharchaning kinetik energiyasi o'zgarishsiz saqlanadi va arqonning taranglik kuchi o'zgarmaydi.
78.	Gidravlik pressning kichik porsheni 40 kN kuch ta'sirida 30 sm pastga tushdi. Bunda katta porshen 6 smko'tarildi. Katta porshenga qanday kuch (kN) ta'sir etadi?	
79.	Gorizondga nisbatan 60° burchak ostida 18 km/soat tezlikda otilgan 400g massali jismning maksimal ko'tarilishbalandligidagi potensial energiyasini (J) toping.	

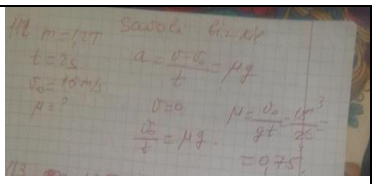
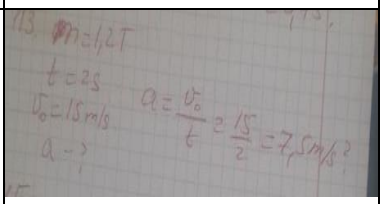
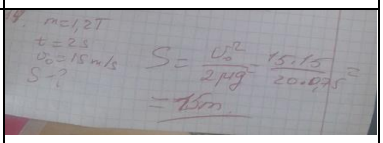
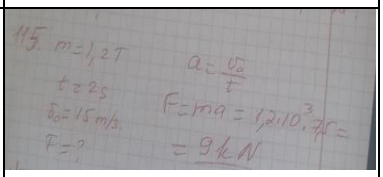
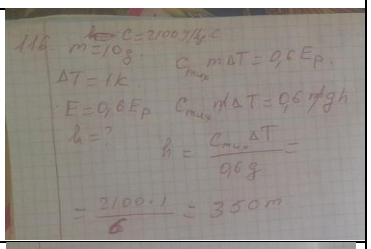
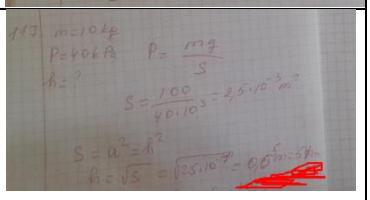
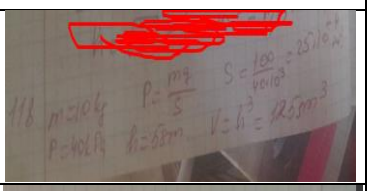
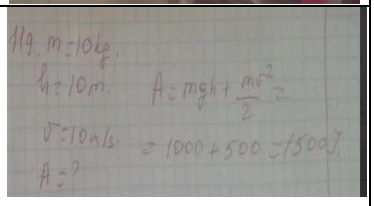
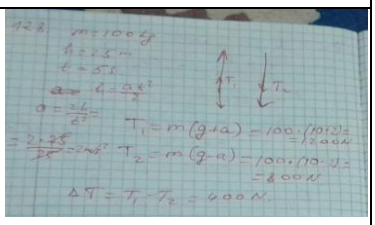
80.	Gorizontal ravishda 600 m/s tezlikda uchib kelgan 10 g massasi o'q uzun ipda erkin osilib turgan 0,5 kg massaliyog'och brusokka 10 sm kirib, unga tiqilib qoldi. Yog'ochning o'q harakatiga qarshilik kuchini toping (kN).	
81.	Gorizontga nisbatan 30° burchakda yo'nalgan 0,2 kN kuch ta'sirida harakatlanayotgan massasi 30 kg jismharakatiga qarshilik qiluvchi ishqalanish kuchini toping. Ishqalanish koeffitsiyenti 0,1 ga teng.	
82.	Gorizontga nisbatan 30° burchakda yo'nalgan 0,2 kN kuch ta'sirida harakatlanayotgan massasi 30 kg jismningtezlanishini (m/s^2) toping. Ishqalanish koeffitsiyenti 0,1 ga teng.	
83.	Grafikda ideal gazning izojarayoni ko'rsatilgan. U uchun termodinamikaning I-qonunini yozing. 	
84.	Grafikda ideal gazning izojarayoni ko'rsatilgan. U uchun termodinamikaning I-qonunini  yozing.	
85.	Grafikda katodda ajralgan mis massasining vaqtga bog'lanishi keltirilgan. Elektrolitdan o o'tuvchi tok kuchi740 mA. Misning elektrokimyoviy ekvivalentini (mg/Kl) aniqlang. 	

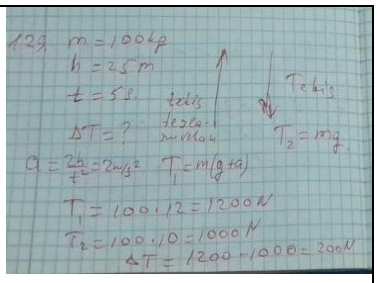
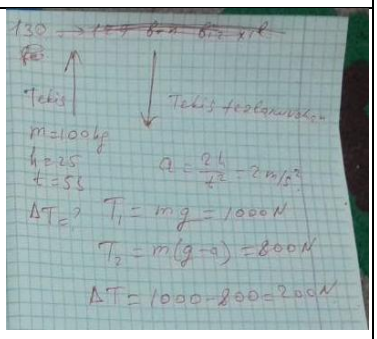
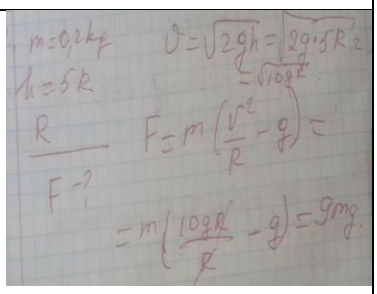
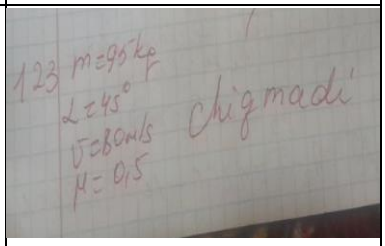
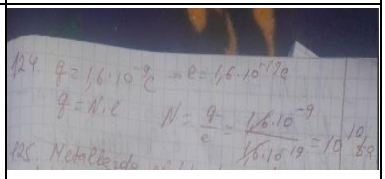
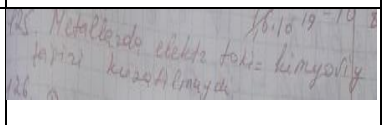
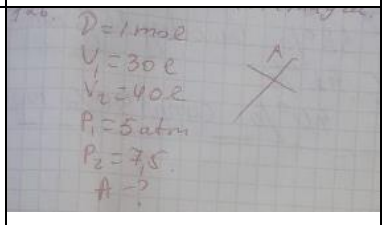
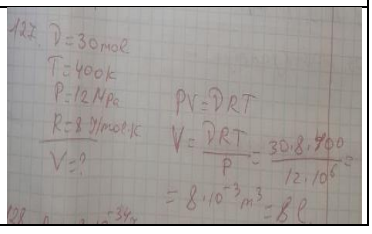
86.	Grafikda o’zgarmas tok o’tishi vaqti bilan rezistordan ajralib chiquvchi issiqlik miqdori orasidagi bog’lanishko’rsatilgan. Agar rezistor qarshiligi 1 Om bo’lsa, undagi tok kuchi (A) qancha? 	
87.	Grafikdan ideal gazning bajargan ishini aniqlang. 	
88.	Grafikdan tok kuchi amplitudasi (mA) va tebranishlar chastotasini (mGz) aniqlang. 	
89.	Grafikdan tok kuchi amplitudasi (mkA) va tebranishlar chastotasini (mGz) aniqlang. 	
90.	Grafikdan tok kuchi tebranishlari tenglamasini yozing. 	
91.	Grafikdan tok kuchi tebranishlari tenglamasini yozing. 	
92.	Hajmi 240 l bo’lgan suvni 4 min da 20 m balandlikka ko’tdilar. Bunda bajarilgan ishning quvvatini (W)aniqlang.	
93.	Har daqiqada ideal gazga Q issiqlik miqdori berilmoqda va har daqiqada gaz A=Q ish bajarmoqda. Bunda qaysijarayon yuz bermoqda?	
94.	Havoda turgan ikkita bir xil kichik sharchalar $q_1 = –500$ nKl va $q_2 = 100$ nKl zaryadlarga ega. Ular bir-birigatekkazildi va 20 sm masofaga surub qo’yildilar. Ular orasidagi Kulon kuchini (mN) toping.	
95.	Havoning nisbiy namligi 100%. Psixrometrning quruq (T_1) va nam (T_2) termometrlari ko’rsatkichlariniteng qoslang.	

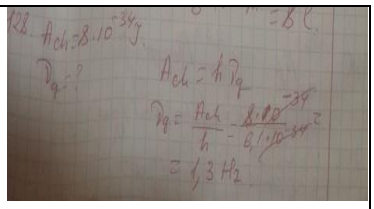
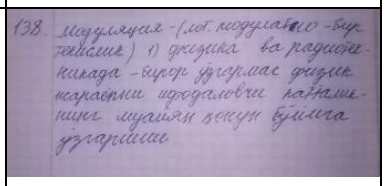
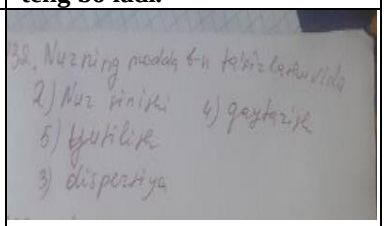
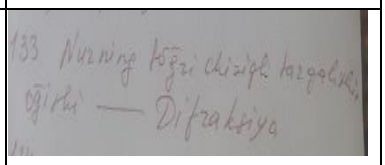
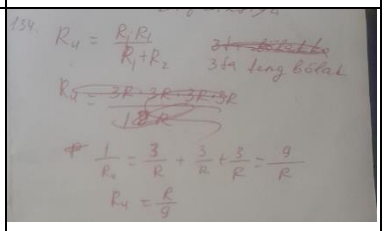
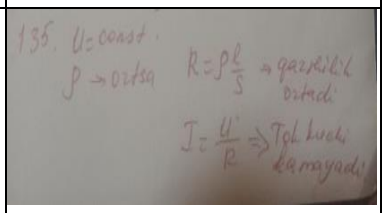
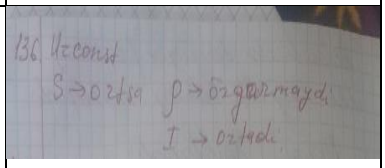
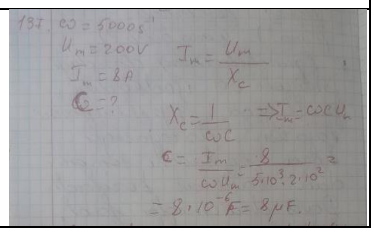
96.	Ichida $1{,}4\cdot10^6$ Pa bosim ostida gaz bo'lgan idish hajmi 6 l li bo'sh idish bilan tutashtirildi. Natijada ikkalaidishda 10^6 Pa bosim qaror topdi. Birinchi idishning hajmini (l) toping. Jarayon izotermik.	Javob: ikkinchi idishdagi hajmi 8 L.
97.	Ideal gaz A holatdan B holatga 3 xil yo'l bilan o'tmaqda. Qaysi o'tishda eng ko'p ish bajariladi? 	
98.	Ideal gaz $p = \alpha V$ qonun bo'yicha kengaymoqda. Quyidagi ifodalardan gaz hajmi V_1 dan V_2 gacha oshgandabajargan ishini grafik ravishda aniqlash mumkin bo'lgan formulani toping.	**Grafikda ko'rganimizdek, gaz hajmi P_2 ga oshganda 8 L ga teng bo'ladi. Bu bizning avvalgi javobimiz bilan mos keladi.**

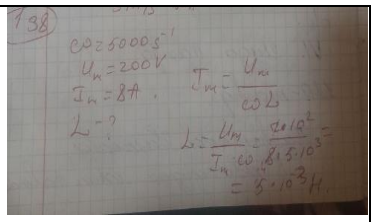
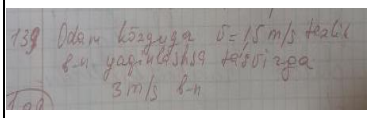
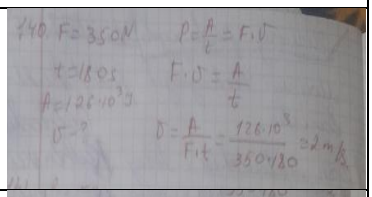
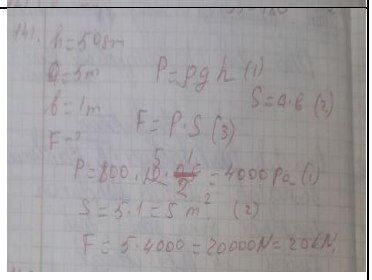
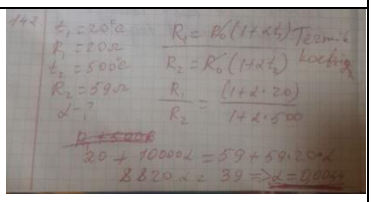
99.	Ideal tebranish konturida tok kuchi tebranishlari amplitudasi 10 mA, kuchlanish amplitudasi esa 3 V.Kondensatordagi kuchlanish 2,4 V bo'lgan momentida g'altakdagi tok kuchini (A) aniqlang.	
100.	Idish asosining yuzasi 500 cm^2. Agar idishga 2 litr suv quyilsa, idishning stol sirtiga bosimi qancha kPa ga oshadi?	
101.	Idishdagi gaz bosimi 600 K temperaturada 2 atm edi. Uning bosimi 300 K temperaturada necha atm bo'ladi?	
102.	Ikki turli ishorali zaryadlar fazoning bir nuqtasida +200 va –250 V potensial yuzaga keltirmoqdalar. Shunuqtadagi natijaviy potensialni (V) toping.	
103.	Ikki zarracha qo'zg'almas kuzatuvchiga nisbatan $\upsilon_1 = 0{,}8$ c va $\upsilon_2 = 0{,}7$ c tezliklarga ega. Agar zarrachalar o'zaro bir to'g'ri chiziq bo'ylab bir yo'nalishda harakatlanayotgan bo'lsa, ularning nisbiy tezliklari modulini aniqlang. c-yorug'lik tezligi.	
104.	Ikki zarracha qo'zg'almas kuzatuvchiga nisbatan $\upsilon_1 = 0{,}8$ c va $\upsilon_2 = 0{,}7$ c tezliklarga ega. Agar zarrachalar o'zaro bir to'g'ri chiziq bo'ylab qarama-qarshi yo'nalishda harakatlanayotgan bo'lsa, ularning nisbiy tezliklari modulini aniqlang. c-yorug'lik tezligi.	
105.	Ikkita bir xil o'tkazgichlar o'zaro parallel ulangan. Agar ulardan birini qarshiligi 3 marta katta bo'lgano'tkazgich bilab almashtirilsa, umumiy qarshilik necha marta o'zgaradi?	
106.	Induktivligi L = 0,04 Gn galtak va sig'imi 1 mkF bo'lgan kondensatordan iborat tebranish konturidagi erkintebranishlar davrini (ms) toping.	
107.	Jism 8 minutda 360 m yo'lni, keyingi 20 minutda esa 3 km yo'lni o'tdi. Harakat davomidagi o'rtacha tezlikni(m/s) toping.	

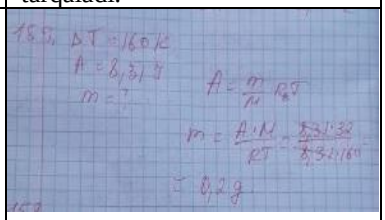
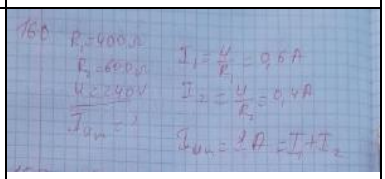
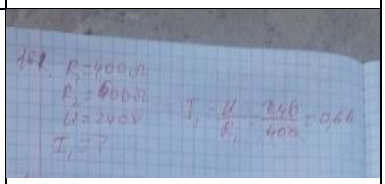
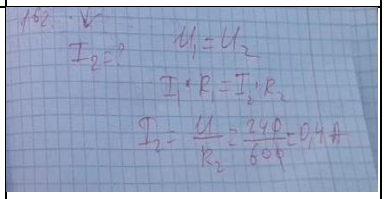
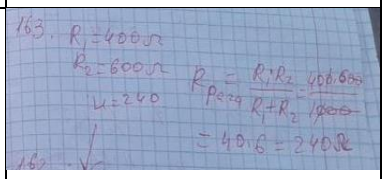
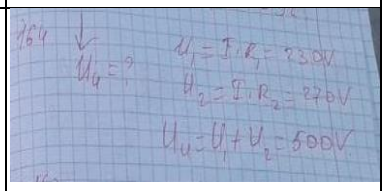
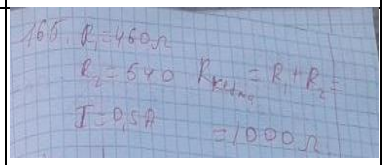
108.	Jism koordinatalari (3; -4) m bo'lgan A nuqtadan koordinatalari (3; 4) m bo'lgan B nuqtaga va undan keyin koordinatalari (-3; 4) m bo'lgan C nuqtaga ko'chdi. Jismning o'tgan yo'li –s ni (m) va ko'chish modulini - Δ s (m) aniqlang.	
109.	Jism qandaydir balandlikdan erkin tushib, yo'lning so'nggi 100 m ni 4 s da o'tdi. Jismning umumiy tushishvaqtini (s) aniqlang.	
110.	Jism yo'ning birinchi yarmini 1 km/soat tezlikda ikkinchi yarmini esa 9 km/soat tezlikda o'tdi. Agar butunyo'lni o'tishga 5 soat vaqt ketgan bo'lsa, jism yo'lning birinchi qismiga qancha vaqt (soat) sarflagan?	Shu sababli, jism yo'ning birinchi yarimiga 2.5 soat sarflangan.
111.	Jism yo'ning birinchi yarmini 1 km/soat tezlikda ikkinchi yarmini esa 9 km/soat tezlikda o'tdi. Agar butunyo'lni o'tishga 5 soat vaqt ketgan bo'lsa, jism yo'lning ikkinchi qismiga qancha vaqt (soat) sarflagan?	Shu sababli, jism yo'ning birinchi yarimiga 2.5 soat sarflangan.
112.	Jismning kinetik energiyasi tinchlikdagi energiyasidan 7 marta katta bo'lsa, uning harakat tezligini aniqlang. c-yorug'lik tezligi.	Shu sababli, jismning harakat tezligi c-yorug'lik tezligi vaqtinchalik qolgan kinetik energiyaga bog'liq emas.
113.	Kaliy uchun elektronning chiqish ishi $0{,}36\cdot10^{-18}$ J ga teng. Kaliyda fotoeffekt qizil chegarasining to'lqinuzunligini (m) toping. U to'lqin uzunligi 400 nm yorug'lik bilan yoritilmoqda.	
114.	Kondensator standart chastotali o'zgaruvchan tok zanjiriga ulangan. Tarmoqdagi kuchlanish 220 V. Zanjirdagitok kuchi 2,5 A. Kondensatorning sig'imi (mkF) qancha?	
115.	Lijaning bir tomoni uzunligi 1,8 m, eni 10 sm bo'lsa, massasi 90 kg li sportchi qorga qanday bosim (kP) beradi?	
116.	Magnit induksiya chiziqlariga nisbatan 30° burchak ostida joylashgan uzunligi 0,5 m bo'lgan o'tkazgichga 10mN kuch ta'sir etmoqda. Maydonning magnit induksiyasi 4 mTl ga teng. O'tkazgichdan o'tuvchi tok kuchini (A) aniqlang.	
117.	Massalari 4,8 kg dan bo'lgan ikki sterjenlar o'z uzunliklari bo'ylab qo'zg'almas kuzatuvchiga nisbatan 0,6c va0,8c tezlikda harakatlanmoqdalar. Ular massalari orasida xosil bo'lgan farqni toping.	
118.	Massalari 5 kg va 10 kg bo'lgan yuklar cho'zilmas ip orqali qo'zg'almas blokka osilgan. Boshlang'ch xolatdauklar tinch va ikkinchi yuk birinchisidan 30 m balandda turibdi. Ular harakatlana boshlaganlaridan so'ng qancha vaqtdan (s) keyin bir hil balandlikda bo'ladilar.	**har ikki yuk ham bir hil balandlikda teng vaqtdan, ya'ni 2.47 s dan keyin bo'ladilar.**
119.	Massalari $8\cdot10^{-23}$ mg va zaryadlari $8\cdot10^{-19}$ Kl dan bo'lgan ikki kichik zaryadlar bir-biridan cheksiz uzoqlikdajoylashgan. Ular bir-biri tomon 3mm/s tezlik bilan yaqinlasha boshladi. Zaryadlar qanday eng kichik masofagacha (nm) yaqinlasha oladilar?	**ikki zaryad bir-biridan eng kichik 62.5 nanometrgacha yaqinlasha oladilar.**

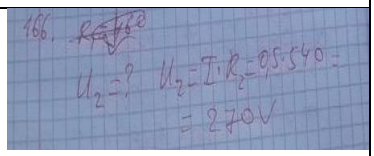
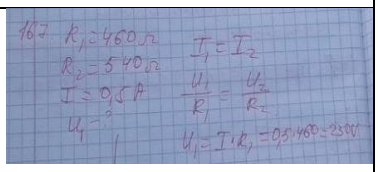
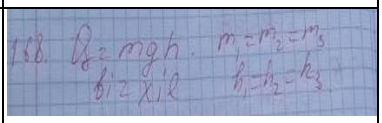
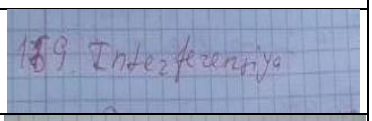
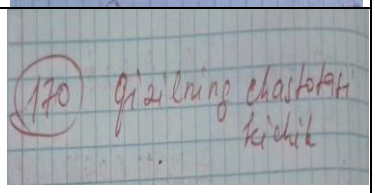
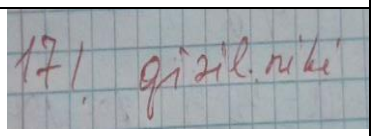
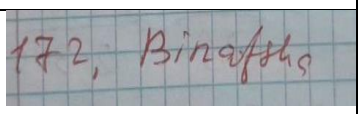
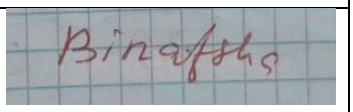
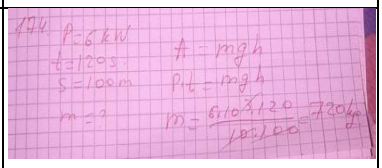
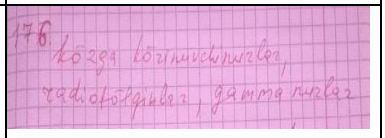
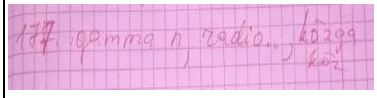
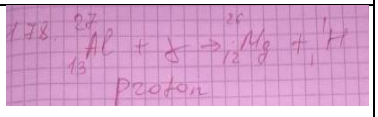
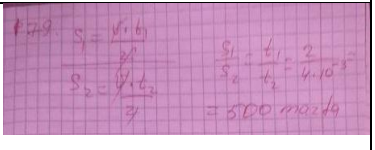
120.	Massasi 1,2 T bo'lgan avtomobil tormoz berilgach 2 s da to'xtadi. Agar avtomobilning boshlang'ich tezligi 15m/s bo'lsa, g'ildirakning ishqalanish koeffitsiyentini aniqlang.	
121.	Massasi 1,2 T bo'lgan avtomobil tormoz berilgach 2 s da to'xtadi. Agar avtomobilning boshlang'ich tezligi 15m/s bo'lsa, avtomobilning tormozlanish tezlanishi modulini (m/s^2) aniqlang.	
122.	Massasi 1,2 T bo'lgan avtomobil tormoz berilgach 2 s da to'xtadi. Agar avtomobilning boshlang'ich tezligi 15m/s bo'lsa, tormozlanish masofasini (m) aniqlang.	
123.	Massasi 1,2 T bo'lgan avtomobil tormoz berilgach 2 s da to'xtadi. Agar avtomobilning boshlang'ich tezligi 15m/s bo'lsa, tormozlanish kuchini (kN) aniqlang.	
124.	Massasi 10 g bo'lgan muz bo'lagining temperaturasi 1 K ga isigan bo'lsa, u qanday balandlikdan tushgan? Muzpotensial energiyasining 60% uning isishiga sarflanadi deb hisoblansin. Muxning solishtirma issiqlik sig'imi 2100 J/kg·ºC.	
125.	Massasi 10 kg bo'lgan kub tayanchga 40 kPa bosim beradi. Kubning balandligini (sm) aniqlang.	
126.	Massasi 10 kg bo'lgan kub tayanchga 40 kPa bosim beradi. Kubning hajmini (sm^3) aniqlang.	
127.	Massasi 10 kg li jism balandligi 10 m bo'gan qiya tekislikdan sirpanib tushib 10 m/s tezlikka erishdi.Ishqalanish kuchining bajargan ishini (J) toping.	
128.	Massasi 100 kg bo'lgan yuk 25 m balandlikka arqon yordamida 5 s davomida vertikal ravishda tekis tezlanuvchan harakatda ko'tarildi. So'ng xuddi shunday tezlanishda pastga tushirildi. Bunda arqonning taranglik kuchi qanchaga o'zgardi?	

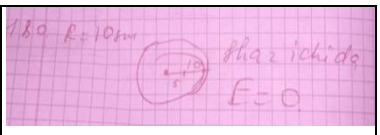
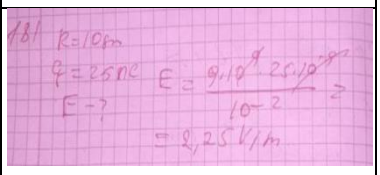
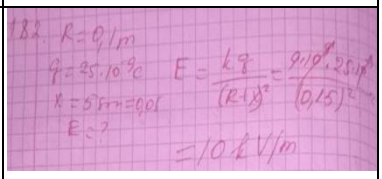
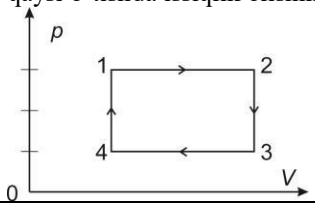
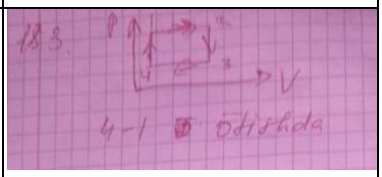
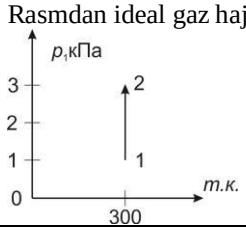
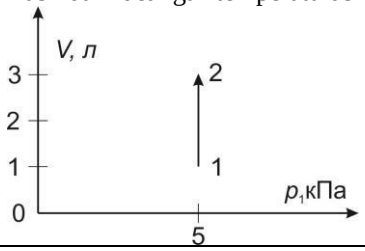
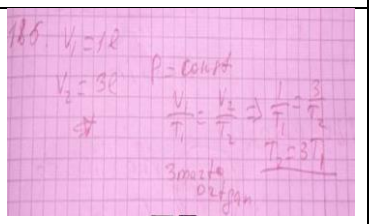
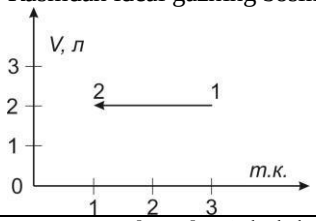
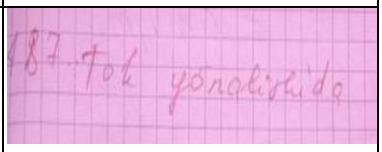
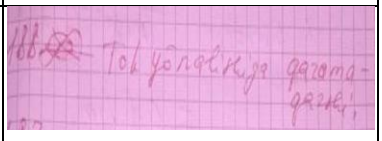
129.	Massasi 100 kg bo’lgan yuk 25 m balandlikka arqon yordamida 5 s davomida vertikal ravishda tekis tezlanuvchan harakatda ko’tarildi. So’ng o’zgarmas tezlikda pastga tushirildi. Bunda arqonning taranglik kuchiqanchaga o’zgardi?	
130.	Massasi 100 kg bo’lgan yuk 25 m chuqurlikka arqon yordamida tekis tushirildi va boshlang’ich nuqtagachatekis tezlanuvchan ravishda 5 s da ko’tarildi. Bunda arqonning taranglik kuchi qanchaga o’zgardi?	
131.	Massasi 200 g bo’lgan kichik sharcha balandligi 5R bo’lgan qiya novdan harakatlanib, R radiusli “o’liksirtmoq” dan o’tdi. Sirtmoqning eng yuqori nuqtasiga sharchaning bosim kuchini (N) aniqlang.	
132.	Massasi 95 kg bo’lgan yadro gorizontga nisbatan 45° burchak ostida 80 m/s tezlikda uchib kelib, tekislik sirtida yotgan massasi 95 kg bo’lgan jismga kirib qoldi. Jism bilan sirt orasidagi sirpanish ishqalanish koeffitsiyenti 0,5bolsa, jismning yadro bilan birgalikda to’xtagunicha o’tgab yo’lini (m) aniqlang.	
133.	Metall sharchaning manfiy zaryadi q=1,6 nKl ga teng. Sharchada qancha ortiqcha elektron bor.	
134.	Metallarda elektr tokining qaysi ta’siri kuzatilmaydi?	
135.	Miqdori 1 mol bo’lgan gaz 2 izoxora va 2 izobaradan iborat sikl bajarmoqda. Gaz hajmining o’zgarish chegarasi 30 l dan 40 l gacha, bosim esa 5 atm – 7,5 atm. Bir sikl davomida bajarilgan ishni (kJ) toping.	
136.	Miqdori 30 mol va maksimal temperaturasi 400 K bo’lgan gazni 12 MPa bosimda ushlash uchun qanday hajmdagi (l) bollon kerak bo’ladi? R=8 J/mol·K.	

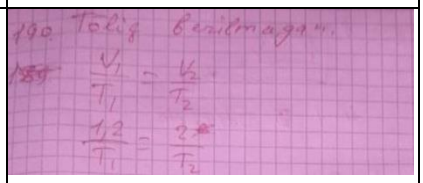
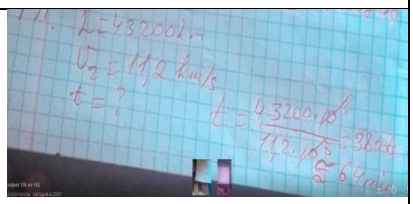
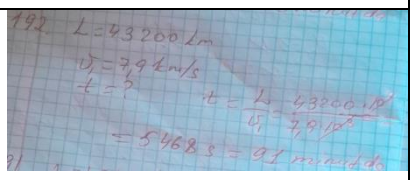
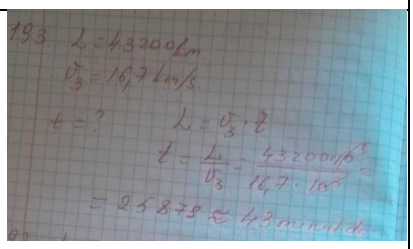
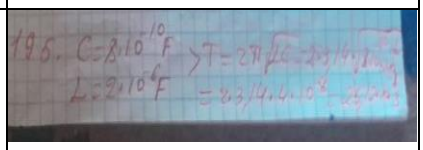
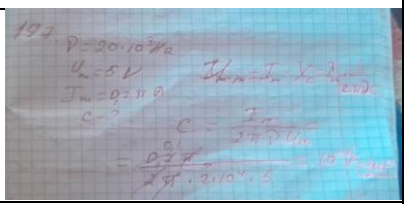
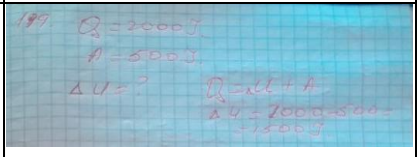
137.	Mis oksidi uchun fotoeffektning qizil chegarasining chastotasi (Gz) qanchaga teng? Mis oksidi elektronining chiqish ishi $8 \cdot 10^{-34}$ J ga teng.	
138.	Modulyasiya – bu…	
139.	Neptun $^{239}_{93}Np$ yadrosining radioaktiv yemirilishida plutoniy $^{239}_{94}Pu$ yadrosi hosil bo'ladi. Bunda yana qanday zarracha chiqariladi?	Bu jarayonda, neutronlar emitrlanadi va plutoniy-239 yadroslari ko'payadi. Bunda, elektronlar va pozitronlar ham hosil bo'ladi, ammo 93 va 94 zarracha emas.
140.	Normal sharoitda hajmi 5x4x2 m^3 bo'lgan xonadagi havo massasini (kg) toping. R=8 J/mol·K. Havoningmolyar massasi 29 g/mol.	**havoning harorati oshishi 7,0859375 × 10^-9 K ga teng bo'ladi.**
141.	Nurning modda bilan o'zaro ta'sirlashuvida qanday jarayonlar kuzatiladi? 1) difraksiya; 2) nur sinishi; 3) dispersiya; 4) qaytarish; 5) yutilish; 6) interferensiya.	
142.	Nurning to'g'ri chiziqli tarqalishidan og'ishiga…	
143.	O'tkazgich qarshiligini 9 marta kamaytirish uchun uni nechta teng bo'lakka bo'lib, ularni parallel ulash kerak?	
144.	O'zgarmas kuchlanishda o'tkazgichning ko'ndalang kesimi oshirilsa, tok kuchi va qarshilik qanday o'zgaradi?	
145.	O'zgarmas kuchlanishda o'tkazgichning ko'ndalang kesimi oshirilsa, solishtirma qarshilik va tok kuchi qandayo'zgaradi?	
146.	O'zgaruvchan tok zanjiriga ulangan g'altakdagi kuchlanish $\omega = 5000\ s^{-1}$ siklik chastota bilan o'zgarmoqda. Kuchlanish va nok kuchi amplitudalari tegishlicha $U_m = 200$ V va $I_m = 4$ A ga teng. G'altakning induktivligini(mGn) toping.	

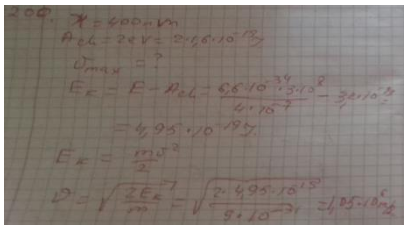
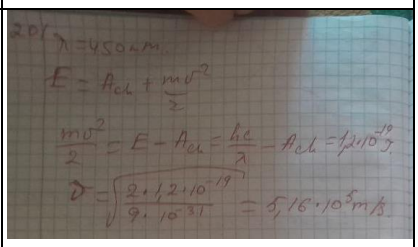
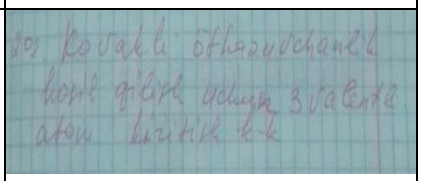
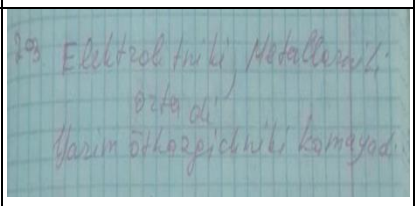
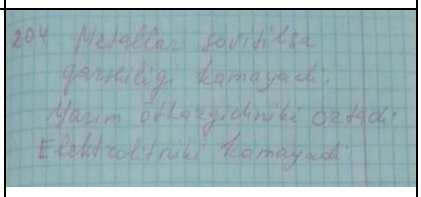
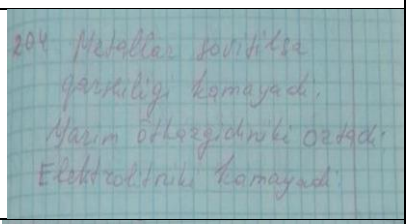
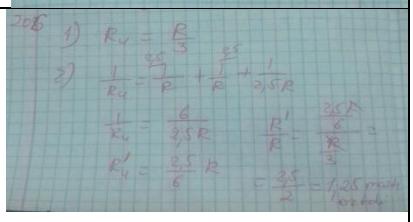
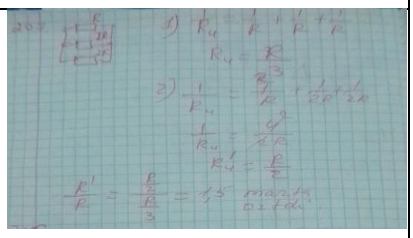
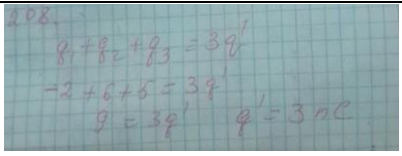
147.	O’zgaruvchan tok zanjiriga ulangan kondensatorning kuchlanishi $\omega = 8000\ s^{-1}$ siklik chastota bilan o’zgarmoqda. Kuchlanish va nok kuchi amplitudalari tegishlicha $U_m = 200$ V va $I_m = 8$ A ga teng. Kondensatorsig’mini (mkF) toping.	
148.	Odam ko’zguga 1,5 m/s tezlikda yaqinlashmoqda. U o’z aksiga qanday tezlikda (m/s) yaqinlashadi?	
149.	Ot 350 N kuch bilan aravani tortmoqda va 3 minut vaqt mobaynida u 126 kJ ish bajarmoqda. Ot qanday tezlik(m/s) bilan harakatlanmoqda?	
150.	Parallelepiped shaklidagi uzunligi 5 m, eni 1 m va balandligi 50 sm bak kerosin bilan to’ldirildi. Kerosinnig baktubiga bosimini (kPa) aniqlang. Kerosin zichligi 800 kg/m^3.	
151.	Parallelepiped shaklidagi uzunligi 5 m, eni 1 m va balandligi 50 sm bak kerosin bilan to’ldirildi. Kerosinnig baktubiga bosim kuchini (kN) aniqlang. Kerosin zichligi 800 kg/m^3.	
152.	Parallelepiped shaklidagi uzunligi 5 m, eni 1 m va balandligi 50 sm bak kerosin bilan to’ldirildi. Kerosinnig bakyon devoriga 20 sm chuqurlikka beradigan bosimini (kPa) aniqlang. Kerosin zichligi 800 kg/m^3.	Javob: Bosim ≈ 161,32 kPa.
153.	Platinali o’tkazgichning 20°C temperaturadagi qarshiligi 20 Om, 500°C temperaturada esa 59 Om. Shuberilganlardan foydalanib platina uchun qatshilikning termik koeffitsiyenti ($°C^{-1}$) qiymatini toping	**Platina uchun qatshilikning termik koeffitsiyenti 0,00392 °C^-1 hisoblanadi**
154.	Plutoniy $^{239}_{94}Pu$ yadrosining radioaktiv yemirilishida neptun $^{239}_{93}Np$ yadrosi hosil bo’ladi. Bunda yana qanday zarracha chiqariladi?	zarracha soni 1 ga oshadi va atom raqami 94 dan 93 ga kamayadi.
155.	Qanday sirt unga tushayotgan barcha nurni qaytaradi?	Ionosfera ko'pincha radio transmissiyalarni va boshqa signalni yoki elektromagnit ta'sirlariga qarashli xavfsizlik vositalarini qaytaradi. Bu qaytish ko'plab sabablar bilan bo'lishi mumkin, masalan, Yer atmosferasidagi yuqori energiya partikallari (masalan, kosmik zarralar), quyosh holati, magnet maydonlar va hokazo.
156.	Qanday sirt unga tushayotgan barcha nurni yutadi?	Ionosfera ko'pincha radio transmissiyalarni va boshqa signalni yoki elektromagnit ta'sirlariga qarashli xavfsizlik vositalarini qaytaradi. Bu qaytish ko'plab sabablar bilan bo'lishi mumkin, masalan, Yer atmosferasidagi yuqori energiya partikallari (masalan, kosmik zarralar), quyosh holati, magnet maydonlar va hokazo.
157.	Qanday to’lqinlar Yer ionosferasi va sirtidan ko’p marta qaytishi hisobiga katta masofalarga tarqaladi?	Yer ionosferasi va sirtidan ko'p marta qaytishi, radio talqinlari va boshqa elektromagnitli ta'sirga ega bo'lgan signal yoki xavfsizlik qurilmalari o'rtasida ko'p marta to'xtalishi sababli yuzaga keladi.

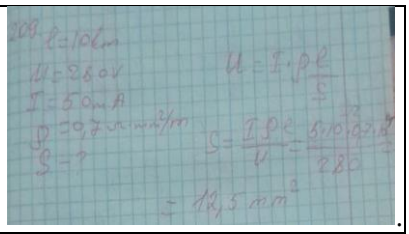
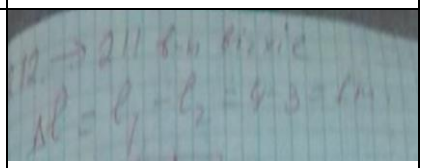
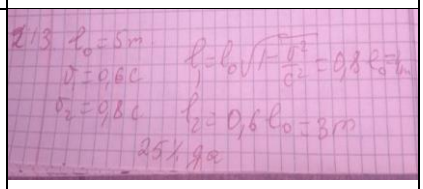
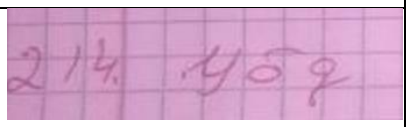
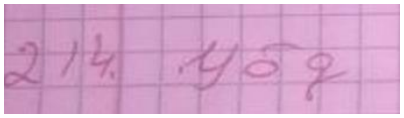
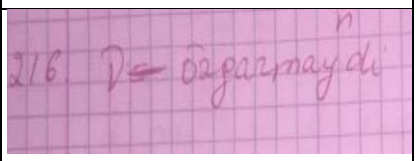
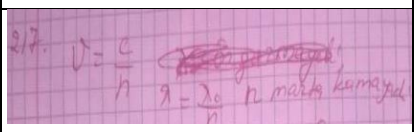
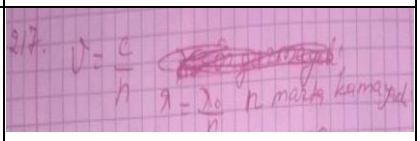
		Bu ta'sirga ko'plab sabablarga ega bo'lishi mumkin, misol uchun, Yerning atmosferasida yuqori energiya partikllari (masalan, kosmik zaryadlar) tufayli yuzaga kelishi, quyosh sharoitlari, magnetik toifalar, kabi sabablar.
158.	Qanday to’lqinlar Yer sirtida og’ishi hisobiga katta masofalarga tarqaladi?	To'g'ri javob: Yer sirtidagi to'qinlar, Yerning o'zining aylanishi sababli yuzaga keladi. Bu aylanish esa Yer va Ay orasidagi gravitatsion kuchlarning o'zaro ta'siridan kelib chiqadi. To'qinlar esa bu aylanishning natijasi bo'lib, shunchaki, Yer va Ay orasidagi gravitatsion kuchlarning o'zaro ta'sirining bir qismi hisobiga yuzaga keladi. Shuning uchun, to'qinlar Yer sirtida og'ishi hisobiga katta masofalarga tarqaladi.
159.	Qandaydir massadagi kislorodni izobarik ravishda $\Delta T = 160$ K ga qizdirilsa, uning hajmini oshirishda 8,31 J ish bajarildi. Kislorod massasini aniqlang. M = 32 g/mol, R = 8,31 J/(K·mol).	
160.	Qarshiliklari R_1=400 Om va R_2=600 Om bo’lgan ikki o’tkazgichlar o’zaro parallel ulangan. Zanjirdagi kuchlanish 240 V. Zanjirdagi umumiy tok kuchi qanchaga (A) teng?	
161.	Qarshiliklari R_1=400 Om va R_2=600 Om bo’lgan ikki o’tkazgichlar o’zaro parallel ulangan. Zanjirdagi kuchlanish 240 V. Birinchi o’tkazgichdagi tok kuchi qanchaga (A) teng?	
162.	Qarshiliklari R_1=400 Om va R_2=600 Om bo’lgan ikki o’tkazgichlar o’zaro parallel ulangan. Zanjirdagi kuchlanish 240 V. Ikkinchi o’tkazgichdagi tok kuchi qanchaga (A) teng?	
163.	Qarshiliklari R_1=400 Om va R_2=600 Om bo’lgan ikki o’tkazgichlar o’zaro parallel ulangan. Zanjirdagi kuchlanish 240 V. Umumiy qarshilik nimaga (Om) teng?	
164.	Qarshiliklari R_1=460 Om va R_2=540 Om bo’lgan ikki o’tkazgichlar o’zaro ketma-ket ulangan. Zanjirdagi tok kuchi 0,5 A. O’tkazgich uchlaridagi umumiy kuchlanish nimaga (V) teng?	
165.	Qarshiliklari R_1=460 Om va R_2=540 Om bo’lgan ikki o’tkazgichlar o’zaro ketma-ket ulangan. Zanjirdagi tok	

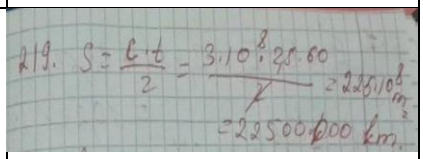
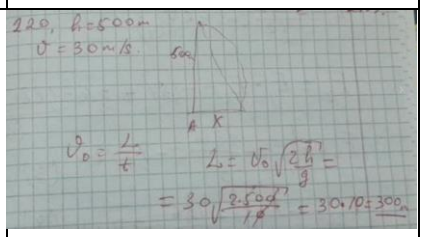
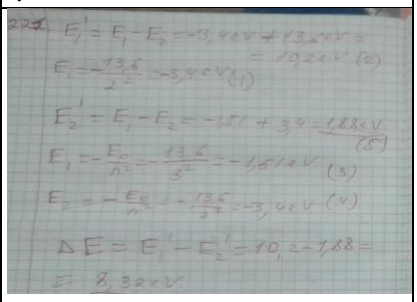
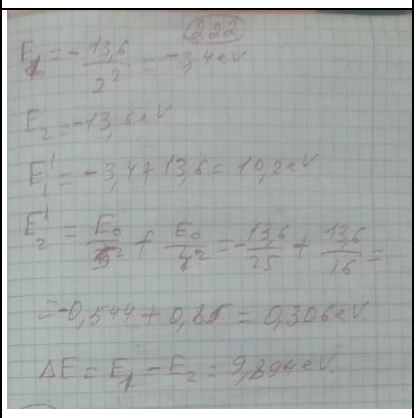
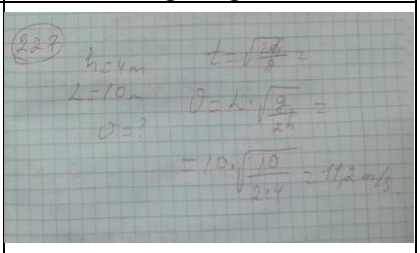
	kuchi 0,5 A. Zanjirning umumiy qarshiligi (Om) aniqlansin.	
166.	Qarshiliklari R_1=460 Om va R_2=540 Om bo'lgan ikki o'tkazgichlar o'zaro ketma-ket ulangan. Zanjirdagi tokkuchi 0,5 A. Ikkinchi o'tkazgich uchlaridagi kuchlanish (V) qanchaga teng?	
167.	Qarshiliklari R_1=460 Om va R_2=540 Om bo'lgan ikki o'tkazgichlar o'zaro ketma-ket ulangan. Zanjirdagi tokkuchi 0,5 A. Birinchi o'tkazgich uchlaridagi kuchlanish (V) qanchaga teng?	
168.	Qattiq tekislikka bir hil balandlikdan massalari teng bo'lgan mis, po'lat va temir tashlanganda ulardan qaysilariko'proq qiziydi? Ularning soloshtirma issiqlik sigimlari: misniki - 400 $\frac{Дж}{кг \cdot К}$, temirnimi - 460 $\frac{Дж}{кг \cdot К}$ va po'larniki - 500 $\frac{Дж}{кг \cdot К}$.	
169.	Qaysi jarayonlar to'lqinlar bilan ish yuritishimizni isbotlaydi? 1) difraksiya; 2) nur sinishi; 3) dispersiya; 4) qaytarish; 5) yutilish; 6) interferensiya.	
170.	Qaysi rangning nurlanish chastotasi kichik?	
171.	Qaysi rangning sindirish ko'rsatkichi kichik?	
172.	Qaysi rangning tarqalish tezligi kichik?	
173.	Qaysi rangning to'lqin uzunligi kichik?	
174.	Quvvati 6 kW bo'lgan ko'tarish masinasi necha kg yukni 2 min da 100 m balandlikka ko'tara oladi?	
175.	Quyida keltirilgan ifodalardan issiqlik dvigatellarining FIK ning maksimal qiymatini xisoblash formulasinitoping.	
176.	Quyidagi elektromagnit to'lqinlarni to'lqin uzunligi kamayib borish tartibida joylashtiring; gamma nurlanish,radioto'lqinlar, ko'zga ko'rinuvchi nur.	
177.	Quyidagi elektromagnit to'lqinlarni to'lqin uzunligi o'sib borish tartibida joylashtiring; gamma nurlanish,radioto'lqinlar, ko'zga ko'rinuvchi nur.	
178.	Quyidagi yadro reaksiyasida qanday zarracha uchib chiqadi: $^{27}_{13}Al + \gamma \rightarrow ^{26}_{12}Mg + ?$	
179.	Radiosignal birinchi nishondan 2 s da ikkinchi nishondan esa 4 ms qaytgan bo'lsa, kuzatuvchidannishonlargacha bo'lgan masofalar necha marta farq qiladi?	

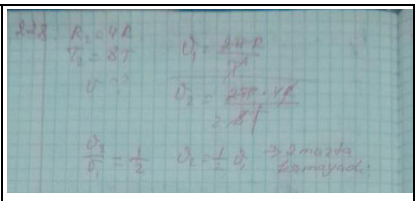
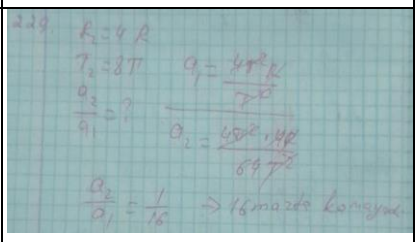
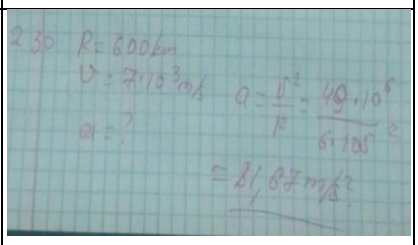
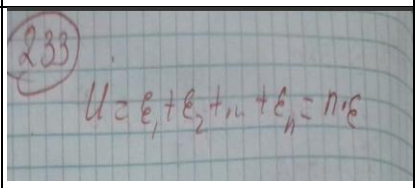
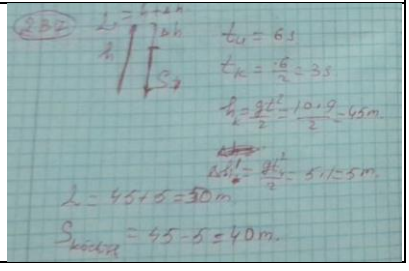
180.	Radiusi 10 sm bo'lgan metall sharga 25 nKl zaryad berildi. Shar markazidan 5 sm masofada elektr maydonkuchlanganligi (kV/m) qanchaga teng?	
181.	Radiusi 10 sm bo'lgan metall sharga 25 nKl zaryad berildi. Shar sirtidagi nuqtada maydon kuchlanganligi(kV/m) qanchaga teng?	
182.	Radiusi 10 sm bo'lgan metall sharga 25 nKl zaryad berildi. Shar sirtidan 5 sm masofada elektr maydonkuchlanganligi (kV/m) qanchaga teng?	
183.	Rasmda qandaydir massali ideal gazning aylanma jarayoni tasvirlangan. Gaz qaysi o'tishda issiqlik olishiniko'rsating. 	
184.	Rasmdan ideal gaz hajmi qanday o'zgarishini aniqlang. 	
185.	Rasmdan ideal gaz temperaturasi qanday o'zgarishini aniqlang. 	
186.	Rasmdan ideal gazning bosimi qanday o'zgarganini aniqlang. 	
187.	Reostat yordamida g'altakdagi tok kamaytirilmoqda. O'zinduksiya toki yo'nalishi qanday bo'ladi?	
188.	Reostat yordamida g'altakdagi tok oshirilmoqda. O'zinduksiya toki yo'nalishi qanday bo'ladi?	
189.	Rezina tiqin bilan berkitilgan shisha kolbada ideal gaz bor. Tiqinda igna bilan kichik teshik xosil qilindi va birozdan so'ng gaz bosimi 5 marta kamaydi, temperaturasi esa 2 marta pasaydi. Gazning kolbadagi ichki	Burada R, gaz sabiti (8.31 J/mol.K) dir. Sonuç olarak, gazın iç enerjisi 3R J azalmıştır.

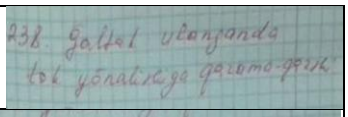
	energiyasining o’zgarishini tiping.	
190.	Silindrda porshen ostida bir atomli ideal gaz bor. Agar uning hajmi izobar ravishda 1,2 l dan 2 l gachakengaygan bo’lsa, u qancha miqdorda issiqlik (J) olgan?	
191.	Sun’iy yo’ldosh Yer atrofini bir marta aylanib chiqishida 43200 km masofani bosib o’tdi. Agar u ikkinchikosmik tezlikka ega bo’lganida Yer atrofini necha min da to’la aylanib chiqar edi?	
192.	Sun’iy yo’ldosh Yer atrofini bir marta aylanib chiqishida 43200 km masofani bosib o’tdi. Agar u birinchikosmik tezlikka ega bo’lganida Yer atrofini necha min da to’la aylanib chiqar edi?	
193.	Sun’iy yo’ldosh Yer atrofini bir marta aylanib chiqishida 43200 km masofani bosib o’tdi. Agar u uchinchikosmik tezlikka ega bo’lganida Yer atrofini necha min da to’la aylanib chiqar edi?	
194.	Sxemada sig’imi 2 nF li kondensator avvaldan 40 V potensiallar farqigacha zaryadlangan. Manba EYuK i 50 V. Kondensatorning to’la zaryadlanishi vaqtida qarshilikda ajraladigan issiqlik miqdori (nJ) aniqlansin. Manbaning ichki qarshiligi xisobga olinmasin. 	
195.	Tebranish konturi 800pF li kondensator va induktivligi 2 mkGn bo’lgan g’altakdan iborat. Konturning xususiytebranishlari davri necha ns?	
196.	Tebranish konturida 5 mJ energiyaga ega bo’lgan erkin so’nmas tebranish yuz bermoqda. Konturdagi kondensator plastinalari bir-biridan uzoqlashtirildi va tebranishlar chastotasi 4 marta oshdi. Bunda elektr kuchlariga qarshi necha mJ ish bajarildi?	konturdagi elektr kuchlariga qarshi 20 mJ ish bajarildi.
197.	Tebranish konturida rezonans chastotasi 20 kGz. Kondensatordagi maksimal kuchlanish 5 V, konturdagi maksimal tok kuchi esa 0,2π A. Kondensator sig’imini (mkF) aniqlang. Konturning aktiv qarshiligi inobatgaolinmasin.	
198.	Temperaturasi 100°C, massasi 1 kg va solishtirma issiqlik sig’imi 500 J/kg·K bo’lgan metall jism issiqlik sig’imi 50 J/K bo’lgan kalorimetrga tushirildi. Unda temperaturasi 10°C bo’lgan 500 g suv bor. Suvning solishtirma issiqlik sig’imi 4200 J/kg·K ga teng bo’lsa, qaror topgan issiqlik muvozanati temperaturasini toping (°C).	Javob: Issiqlik muvozanati temperaturasi 100°C ga teng.
199.	Termodinamik sistemaga 2000 J issiqlik miqdori berib, uning ustida 500 J ish bajarildi. Sistemaning ichkienergiyasining o’zgarishini (J) aniqlang.	

200.	To’lqin uzunligi 400 nm bo’lgan yorug’lik nuri bilan yoritilganda chiqish ishi 2 eV bo’lgan metall sirtidanfotoelektronlar qanday maksimal tezlikda (mm/s) uchib chiqadi?	
201.	To’lqin uzunligi 450 nm bo’lgan yorug’lik nuri bilan yoritilganda chiqish ishi 2,5 eV bo’lgan metall sirtidanfotoelektronlar qanday maksimal tezlikda (mm/s) uchib chiqadi?	
202.	To’rt valentli kremniy (4) da kovakli o’tkazuvchanlik bo’lishi uchun unga qanday primes qo’shish kerak?	
203.	Tok tuzli aralashma, misli o’tkazgich va kremniyli rezistor orqali o’tmoqda. Agar ularni qizdirilsa qarshiliklariqanday o’zgaradi?	
204.	Tok tuzli aralashma, misli o’tkazgich va kremniyli rezistor orqali o’tmoqda. Agar ularni sovitilsa qarshiliklariqanday o’zgaradi?	
205.	Tomonlari 0,9 m bo’lgan kvadrat uchlariga xar birining zaryadi 2 nKl dan bo’lgan bit hil manfiy zaryadlar joylashtirilgan. Zaryadlar sistemasi muvozanatda bo’lishi uchun kvadratning markaziga qanday musbat zaryad (nKl) joylashtirish kerak. $_2$ = 1,4.	
206.	Uchta bir xil o’tkazgichlar o’zaro parallel ulangan. Agar ulardan birini qarshiligi 2,5 marta katta bo’lgano’tkazgich bilab almashtirilsa, umumiy qarshilik necha marta o’zgaradi?	
207.	Uchta bir xil o’tkazgichlar o’zaro parallel ulangan. Agar ulardan ikkitasini qarshiligi 2 marta katta bo’lgano’tkazgich bilab almashtirilsa, umumiy qarshilik necha marta o’zgaradi?	
208.	Uchta bir xil sharlar $q_1 = -2$ nKl, $q_2 = 6$ nKl, $q_3 = 5$ nKl zaryadlarga ega. Ular o’zaro bir-biriga tekkazilib, yana avvalgiholatiga keltirilganidan so’ng, xar bir shardagi zaryad (nKl) qanday bo’ladi?	

209.	Uzunligi 10 km li alyumin sim uchlaridagi kuchlanish 280 V ga teng. Tok kuchi 50 mA. Alyuminiyning solishtirma qarshiliga 0,7 Om·mm^2/m. Simning ko'ndalang kesim yuzasini toping (mm^2).	
210.	Uzunligi l bo'lgan bir jinsli to'sin ikki tayanch yordamiga gorizontal holatda joylashgan. To'sinning bir uchi birinchi tayanchda, ikkinchi tayanch esa birinchisidan l/4 masofada qo'yilgan. Uning ikkinchi uchiga 1 kN kuchta'sir etmoqda. Ikkinchi tayanchning reaksiya kuchini (kN) toping.	ikkinchi tayanchdagi reaksiya kuchi F_R ≈ ±1.68 N ga teng.
211.	Uzunligi l bo'lgan bir jinsli to'sin ikki tayanch yordamiga gorizontal holatda joylashgan. To'sinning bir uchi birinchi tayanchda, ikkinchi tayanch esa birinchisidan l/4 masofada qo'yilgan. Uning ikkinchi uchiga 1 kN kuchta'sir etmoqda. Birinchi tayanchning reaksiya kuchini (kN) toping.	ikkinchi tayanchdagi reaksiya kuchi F_R ≈ ±1.68 N ga teng.
212.	Uzunliklari 5 m dan bo'lgan ikkita sterjenlar o'z uzunliklari bo'ylab qo'zg'almas kuzatuvchiga nisbatan 0,6c va0,8c tezlikda harakatlanmoqdalar. Ular uzunliklari orasida xosil bo'lgan farqni toping.	
213.	Uzunliklari 5 m dan bo'lgan ikkita sterjenlar o'z uzunliklari bo'ylab qo'zg'almas kuzatuvchiga nisbatan 0,6c va0,8c tezlikda harakatlanmoqdalar. Ular uzunliklari necha foizga farq qiladi?	
214.	Vakuumda turli xil rangdagi nurlar bir xil to'lqin uzunligiga ega bo'lishi mumkinmi? Bir xil chastotagachi?	
215.	Vakuumdan boshqa muhitga o'tganda yorug'lik to'lqinining chastotasi va to'lqin uzunliga qanday o'zgaradi?	
216.	Vakuumdan boshqa muhitga o'tganda yorug'lik to'lqinining chastotasi va tezligi qanday o'zgaradi?	
217.	Vakuumdan boshqa muhitga o'tganda yorug'lik to'lqinining tezligi va to'lqin uzunliga qanday o'zgaradi?	
218.	Vakuumli diodda elektron anodga 12 Mm/s tezlikda yetib keladi. Anod kuchlanishini (V) toping. Elektronmassasi 9·10^{-31} kg.	

219.	Veneraga yuborilgan radiosignal 2,5 minutdan keyin qabul qilindi. Yerdan Veneragacha bo'lgan masofani (Gm)aniqlang.	
220.	Vertolyo't 500 m balandlikda 108 km/soat tezlikda gorizontal uchmoqda. U A nuqta tepasidan o'tayotganidayuk tashlandi. Yuk A nuqtadan qanday masofaga (m) borib tushadi?	 .
221.	Vodorod atomida 2-energetik satxdan 1- satxga otishda nurlangan foton energiyasi 3-energetik satxdan 2-satxga otishdagi nurlanish energiyasidan qanchaga farq qiladi? $E_1 = -13,6$ eV.	
222.	Vodorod atomida 2-energetik satxdan 1- satxga otishda nurlangan foton energiyasi 5-energetik satxdan 4-satxga otishdagi nurlanish energiyasidan qanchaga farq qiladi? $E_1 = -13,6$ eV.	
223.	Vodorod atomida elaktronning 1-energetik satxdan 6-satxga o'tish extimolligi nechtaligini aniqlang.	Shunday qilib, vodorod atomidagi elaktronning 6-energetik satxdan 1-satxga o'tish extimolligi 2.06 * 10^-18 J ga tengdir.
224.	Vodorod atomida elaktronning 6-energetik satxdan 1-satxga o'tish extimolligi nechtaligini aniqlang.	Shunday qilib, vodorod atomidagi elaktronning 6-energetik satxdan 1-satxga o'tish extimolligi 2.06 * 10^-18 J ga tengdir.
225.	Yassi kondensator EYuK i 200 V bo'lgan o'zgarmas tok manbaidan zaryadlandi va bunda u 1 mkJ energiyaga ega bo'ldi. Keyin kondensator manbadan uzilib uning plastinalari orasidagi masofa 0,2 mm dan 2 mm gachaoshirildi. Bu jarayonda bajarilgan ishni (mkJ) aniqlang.	Shunday qilib, kondensator manbaidan uzilmasdan plastinalari orasidagi masofani oshirish jarayonida bajarilgan ish 0.02 mJ + 1.305 * 10^-3 J = 0.021305 mJ ga tengdir.
226.	Yassi kondensator EYuK i 200 V bo'lgan o'zgarmas tok manbaidan zaryadlandi va bunda u 1 mkJ energiyagaega bo'ldi. Kondensator manbadan uzilmasdan uning plastinalari orasidagi masofa 0,2 mm dan 2 mm gacha oshirildi. Bu jarayonda bajarilgan ishni (mkJ) aniqlang.	Shunday qilib, kondensator manbaidan uzilmasdan plastinalari orasidagi masofani oshirish jarayonida bajarilgan ish 0.02 mJ + 1.305 * 10^-3 J = 0.021305 mJ ga tengdir.
227.	Yer satxidan 4 m yuqoridan gorizontal otilgan koptok otilgan nuqtaga nisbatan 10 m narbga borib tushdi.Koptokning Yerga urilish paytidagi tezligini (m/s) aniqlang. Havoning qarshiligi hisobga olimasin.	

228.	Yer sun’iy yo’ldoshining aylanish orbitasi radiusini 4 marta oshirilganda uning aylanish davri 8 marta oshdi.Yo’ldoshning orbitadagi tezligi necha marta o’zgaradi?	
229.	Yer sun’iy yo’ldoshining aylanish orbitasi radiusini 4 marta oshirilganda uning aylanish davri 8 marta oshdi.Yo’ldoshning markazga intilma tezlanishi necha marta o’zgaradi?	
230.	Yerning sun’iy yo’ldoshi Yer satxidan 600 km balandlikda aylana bo’ylab 7 km/s tezlikda harakatlanmoqda.Yo’ldoshning orbita bo’ylab harakatidagi markazga intilma tezlanishi qanchaga (m/s^2) teng?	
231.	Yo’lning 3 km li gorizontal qismida avtomobilning tezligi 36 dan 72 km/soat gacha oshdi. Avtomobil massasi 3 T. Ishqalanish koeffitsiyenti 0,01. Avtomobil dvigatelining o’rtacha quvvatuni (kW) aniqlang.	Dvigatelning o'rtacha quvvati: P = W / t t = d / v_bosh v_bosh = (36 km/soat) / 3.6 = 10 m/son (boshlang'ich tezlik) t = 3000 m / 10 m/son = 300 s P = W / t = 13.5 MJ / 300 s = 45 kW
232.	Yo’lning 3 km li gorizontal qismida avtomobilning tezligi 36 dan 72 km/soat gacha oshdi. Avtomobil massasi 3 T. Ishqalanish koeffitsiyenti 0,01. Avtomobil dvigatelining bajargan ishini (MJ) aniqlang.	Dvigatelning bajargan ishi: W = f_ishq * E_kin_oshish W = (30 N/kg) * (450000 J) = 13500000 J = 13.5 MJ
233.	Yopiq zanjir EYuK i E va ichki qarshiligi r bo’lgan n – ta ketma-ket ulangan galvanik elementlardan iborat. Elementlardan birortasining qisqichlariga ulangan ideal voltmetr nimani ko’rsatadi? Ulovchi o’tkazgichlarningqarshiliklari e’tiborga olinmasin.	
234.	Yorug’lik nuri havodan shisha prizma orqali o’tishda uning … tomon og’adi.	yuqori
235.	Yorug’lik nuri shishadan havo prizmasi orqali o’tishda uning … tomon og’adi.	Yorug’lik nuri shishadan havo prizmasi orqali o’tishda uning spektri tarqalganide, uning yuqori tomoni og’adi.
236.	Yupqa kondensator 6 mkJ energiyaga ega. Agar kondensator o’lchamlari 3 marta oshsa, potensiallar farqio’zgarmagan holatda uning energiyasi necha mJ bo’ladi?	Javob: Kondensator o’lchamlari 3 marta oshganida, potensiallar farqi o’zgarmagan holatda yupqa kondensatorning energiyasidagi o’zgarish $1.5V^2$ mJ bo’ladi.
237.	Yuqoriga vertikal otilgan tosh 6 s dan keyin yerga qaytib tushdi. Tosh harakatining 4 s dagi bosib o’tgan yo’lini s (m) va ko’chish modulini Δs aniqlang.	

238.	Zanjirdagi g’altak ulanganda o’zinduksiya toki yo’nalishi qanday bo’ladi?	
239.	Zanjirdagi g’altak uzilganda o’zinduksiya toki yo’nalishi qanday bo’ladi?