{'headers': {'date': 'Sun, 14 Apr 2024 10:07:31 GMT', 'content-type': 'application/json;charset=utf-8', 'content-length': '16573', 'connection': 'keep-alive', 'keep-alive': 'timeout=25', 'vary': 'Accept-Encoding', 'access-control-allow-origin': '\*', 'access-control-expose-headers': '\*', 'x-acs-request-id': 'F07BBB4D-B3EE-5B31-BA11-E29B5D9B3650', 'x-acs-trace-id': '03836e7572435901aac37886465351f3', 'etag': '1N1p9FeJ7N9W0tEbHKF+x6g5'}, 'statusCode': 200, 'body': {'Data': '{"algo\_version":"","doc\_layout":[{"layout\_type":"text","pos":[{"x":78,"y":366},{"x":78,"y":496},{"x":1131,"y":496},{"x":1131,"y":366}]},{"layout\_type":"text","pos":[{"x":81,"y":603},{"x":81,"y":649},{"x":642,"y":649},{"x":642,"y":603}]},{"layout\_type":"text","pos":[{"x":80,"y":178},{"x":80,"y":250},{"x":475,"y":250},{"x":475,"y":178}]},{"layout\_type":"text","pos":[{"x":78,"y":123},{"x":78,"y":164},{"x":756,"y":164},{"x":756,"y":123}]},{"layout\_type":"text","pos":[{"x":78,"y":658},{"x":78,"y":847},{"x":1150,"y":847},{"x":1150,"y":658}]},{"layout\_type":"text","pos":[{"x":80,"y":515},{"x":80,"y":584},{"x":1267,"y":584},{"x":1267,"y":515}]},{"layout\_type":"text","pos":[{"x":79,"y":269},{"x":79,"y":348},{"x":351,"y":348},{"x":351,"y":269}]},{"layout\_type":"text","pos":[{"x":80,"y":2030},{"x":80,"y":2149},{"x":1034,"y":2149},{"x":1034,"y":2030}]},{"layout\_type":"text","pos":[{"x":77,"y":1178},{"x":77,"y":1325},{"x":730,"y":1325},{"x":730,"y":1178}]},{"layout\_type":"text","pos":[{"x":80,"y":1340},{"x":80,"y":1381},{"x":701,"y":1381},{"x":701,"y":1340}]},{"layout\_type":"text","pos":[{"x":76,"y":1499},{"x":76,"y":1539},{"x":383,"y":1539},{"x":383,"y":1499}]},{"layout\_type":"text","pos":[{"x":78,"y":1392},{"x":78,"y":1435},{"x":890,"y":1435},{"x":890,"y":1392}]},{"layout\_type":"text","pos":[{"x":75,"y":1547},{"x":75,"y":1654},{"x":1571,"y":1654},{"x":1571,"y":1547}]},{"layout\_type":"text","pos":[{"x":70,"y":1761},{"x":70,"y":1859},{"x":1568,"y":1859},{"x":1568,"y":1761}]},{"layout\_type":"text","pos":[{"x":76,"y":1710},{"x":76,"y":1751},{"x":382,"y":1751},{"x":382,"y":1710}]},{"layout\_type":"text","pos":[{"x":82,"y":2175},{"x":82,"y":2315},{"x":1262,"y":2315},{"x":1262,"y":2175}]},{"layout\_type":"text","pos":[{"x":77,"y":1119},{"x":77,"y":1160},{"x":382,"y":1160},{"x":382,"y":1119}]},{"layout\_type":"text","pos":[{"x":78,"y":1974},{"x":78,"y":2018},{"x":395,"y":2018},{"x":395,"y":1974}]},{"layout\_type":"text","pos":[{"x":77,"y":1922},{"x":77,"y":2018},{"x":395,"y":2018},{"x":395,"y":1922}]},{"layout\_type":"text","pos":[{"x":78,"y":973},{"x":78,"y":1052},{"x":526,"y":1053},{"x":526,"y":973}]},{"layout\_type":"text","pos":[{"x":77,"y":916},{"x":77,"y":956},{"x":382,"y":956},{"x":382,"y":916}]},{"layout\_type":"foot","pos":[{"x":4,"y":2270},{"x":4,"y":2302},{"x":130,"y":2302},{"x":130,"y":2270}]},{"layout\_type":"text","pos":[{"x":79,"y":1340},{"x":79,"y":1433},{"x":888,"y":1433},{"x":888,"y":1340}]}],"doc\_sptext":[{"layout\_type":"bold","pos":[{"x":81,"y":126},{"x":81,"y":162},{"x":756,"y":162},{"x":756,"y":126}]},{"layout\_type":"bold","pos":[{"x":79,"y":1713},{"x":79,"y":1748},{"x":382,"y":1748},{"x":382,"y":1713}]},{"layout\_type":"bold","pos":[{"x":79,"y":1501},{"x":79,"y":1536},{"x":382,"y":1536},{"x":382,"y":1501}]},{"layout\_type":"bold","pos":[{"x":80,"y":1925},{"x":80,"y":1960},{"x":382,"y":1960},{"x":382,"y":1925}]},{"layout\_type":"bold","pos":[{"x":81,"y":919},{"x":81,"y":953},{"x":383,"y":953},{"x":383,"y":919}]},{"layout\_type":"bold","pos":[{"x":81,"y":1123},{"x":81,"y":1158},{"x":382,"y":1158},{"x":382,"y":1123}]}],"doc\_subfield":[{"layout\_type":"single","pos":[{"x":70,"y":112},{"x":70,"y":2262},{"x":1576,"y":2262},{"x":1576,"y":112}]}],"figure":[{"type":"subject\_pattern","x":1185,"y":608,"w":389,"h":256,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":1185,"y":608},{"x":1574,"y":608},{"x":1574,"y":864},{"x":1185,"y":864}]},{"type":"subject\_big\_bracket","x":143,"y":2033,"w":392,"h":127,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":143,"y":2033},{"x":535,"y":2033},{"x":535,"y":2160},{"x":143,"y":2160}]},{"type":"subject\_big\_bracket","x":146,"y":371,"w":290,"h":128,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":146,"y":371},{"x":436,"y":371},{"x":436,"y":499},{"x":146,"y":499}]},{"type":"subject\_big\_bracket","x":146,"y":271,"w":203,"h":75,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":146,"y":271},{"x":349,"y":271},{"x":349,"y":346},{"x":146,"y":346}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":824,"y":1811,"w":99,"h":1507,"angle":-90},"points":[{"x":71,"y":1762},{"x":1576,"y":1762},{"x":1576,"y":1859},{"x":71,"y":1859}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":665,"y":2124,"w":264,"h":1179,"angle":-90},"points":[{"x":76,"y":1993},{"x":1254,"y":1993},{"x":1254,"y":2256},{"x":76,"y":2256}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":482,"y":1298,"w":279,"h":836,"angle":-90},"points":[{"x":65,"y":1159},{"x":900,"y":1159},{"x":900,"y":1437},{"x":65,"y":1437}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":299,"y":1015,"w":86,"h":457,"angle":-90},"points":[{"x":71,"y":972},{"x":526,"y":972},{"x":526,"y":1057},{"x":71,"y":1057}]}],"height":2339,"orgHeight":2339,"orgWidth":1654,"page\_id":0,"page\_title":"","part\_info":[{"part\_title":"四、(本题满分8分)","pos\_list":[[{"x":76,"y":919},{"x":520,"y":920},{"x":520,"y":1055},{"x":76,"y":1055}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"计算不定积分$$\\\\int { \\\\frac { a r c \\\\tan x } { x ^ { 2 } \\\\left( 1 + x ^ { 2 } \\\\right) } d x . }$$","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":972},{"x":1654,"y":972},{"x":1654,"y":1159},{"x":0,"y":1159}]],"pos\_list":[[{"x":71,"y":972},{"x":526,"y":972},{"x":526,"y":1057},{"x":71,"y":1057}]],"element\_list":[{"type":0,"text":"计算不定积分$$\\\\int { \\\\frac { a r c \\\\tan x } { x ^ { 2 } \\\\left( 1 + x ^ { 2 } \\\\right) } d x . }$$","pos\_list":[[{"x":76,"y":974},{"x":520,"y":974},{"x":520,"y":1055},{"x":76,"y":1055}]],"content\_list":[{"type":1,"prob":99,"string":"计算不定积分","option":"","pos":[{"x":76,"y":982},{"x":293,"y":982},{"x":293,"y":1046},{"x":76,"y":1046}]},{"type":2,"prob":94,"string":"$$\\\\int { \\\\frac { a r c \\\\tan x } { x ^ { 2 } \\\\left( 1 + x ^ { 2 } \\\\right) } d x . }$$","option":"","pos":[{"x":293,"y":974},{"x":520,"y":975},{"x":520,"y":1055},{"x":293,"y":1054}]}]}]}]},{"part\_title":"五、(本题满分8分)","pos\_list":[[{"x":77,"y":1123},{"x":891,"y":1124},{"x":891,"y":1434},{"x":77,"y":1436}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"设函数f(x)=$$1 - 2 x ^ { 2 } ,$$,x<-1,$$x ^ { 3 } ,$$ -1≤x≤2,12x-16,x>2.(1)写出f(x)的反函数g(x)的表达式;(2)g(x))是否有间断点、不可导点,若有,指出这些点.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1159},{"x":1654,"y":1159},{"x":1654,"y":1760},{"x":0,"y":1760}]],"pos\_list":[[{"x":65,"y":1159},{"x":900,"y":1159},{"x":900,"y":1437},{"x":65,"y":1437}]],"element\_list":[{"type":0,"text":"设函数f(x)=$$1 - 2 x ^ { 2 } ,$$,x<-1,$$x ^ { 3 } ,$$ -1≤x≤2,12x-16,x>2.","pos\_list":[[{"x":77,"y":1161},{"x":731,"y":1159},{"x":732,"y":1327},{"x":78,"y":1328}]],"content\_list":[{"type":1,"prob":99,"string":"设函数","option":"","pos":[{"x":78,"y":1227},{"x":181,"y":1229},{"x":181,"y":1262},{"x":77,"y":1260}]},{"type":1,"prob":95,"string":"f(x)=","option":"","pos":[{"x":181,"y":1160},{"x":324,"y":1160},{"x":324,"y":1310},{"x":181,"y":1310}]},{"type":2,"prob":99,"string":"$$1 - 2 x ^ { 2 } ,$$","option":"","pos":[{"x":335,"y":1173},{"x":478,"y":1173},{"x":478,"y":1217},{"x":335,"y":1218}]},{"type":1,"prob":99,"string":",x<-1,","option":"","pos":[{"x":466,"y":1177},{"x":656,"y":1175},{"x":656,"y":1218},{"x":466,"y":1220}]},{"type":2,"prob":99,"string":"$$x ^ { 3 } ,$$","option":"","pos":[{"x":336,"y":1230},{"x":394,"y":1230},{"x":394,"y":1271},{"x":336,"y":1271}]},{"type":1,"prob":99,"string":"-1≤x≤2,","option":"","pos":[{"x":517,"y":1234},{"x":731,"y":1232},{"x":732,"y":1274},{"x":517,"y":1275}]},{"type":1,"prob":97,"string":"12x-16,x>2.","option":"","pos":[{"x":334,"y":1288},{"x":624,"y":1288},{"x":624,"y":1327},{"x":334,"y":1327}]}]},{"type":0,"text":"(1)写出f(x)的反函数g(x)的表达式;","pos\_list":[[{"x":79,"y":1343},{"x":700,"y":1343},{"x":700,"y":1375},{"x":79,"y":1376}]],"content\_list":[{"type":1,"prob":99,"string":"(1)写出f(x)的反函数g(x)的表达式;","option":"","pos":[{"x":79,"y":1343},{"x":700,"y":1343},{"x":700,"y":1375},{"x":79,"y":1376}]}]},{"type":0,"text":"(2)g(x))是否有间断点、不可导点,若有,指出这些点.","pos\_list":[[{"x":80,"y":1392},{"x":891,"y":1391},{"x":891,"y":1434},{"x":80,"y":1436}]],"content\_list":[{"type":1,"prob":99,"string":"(2)g(x)","option":"","pos":[{"x":80,"y":1392},{"x":205,"y":1392},{"x":205,"y":1435},{"x":80,"y":1436}]},{"type":1,"prob":98,"string":")是否有间断点、不可导点,若有,指出这些点.","option":"","pos":[{"x":205,"y":1396},{"x":891,"y":1395},{"x":891,"y":1427},{"x":205,"y":1428}]}]}]}]},{"part\_title":"七、(本题满分8分)","pos\_list":[[{"x":77,"y":1714},{"x":1566,"y":1714},{"x":1566,"y":2256},{"x":77,"y":2265}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"设f(x)在区间[[a,b]上具有二阶导数,且f(a)=f(b)=0,f\'(a)f\'(b)>0.证明:存在ξ∈(a,b)和n∈(a,b),使f(ξ)=0及f\'(n)=0.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1760},{"x":1654,"y":1760},{"x":1654,"y":1980},{"x":0,"y":1980}]],"pos\_list":[[{"x":71,"y":1760},{"x":1576,"y":1760},{"x":1576,"y":1859},{"x":71,"y":1859}]],"element\_list":[{"type":0,"text":"设f(x)在区间[[a,b]上具有二阶导数,且f(a)=f(b)=0,f\'(a)f\'(b)>0.证明:存在ξ∈(a,b)和n∈(a,b),使f(ξ)=0及f\'(n)=0.","pos\_list":[[{"x":77,"y":1759},{"x":1566,"y":1761},{"x":1566,"y":1861},{"x":77,"y":1859}]],"content\_list":[{"type":1,"prob":95,"string":"设f(x)在区间[","option":"","pos":[{"x":78,"y":1768},{"x":310,"y":1768},{"x":310,"y":1800},{"x":78,"y":1800}]},{"type":1,"prob":99,"string":"[a,b]","option":"","pos":[{"x":310,"y":1764},{"x":394,"y":1763},{"x":394,"y":1803},{"x":310,"y":1804}]},{"type":1,"prob":99,"string":"上具有二阶导数,且","option":"","pos":[{"x":394,"y":1768},{"x":700,"y":1768},{"x":700,"y":1800},{"x":394,"y":1800}]},{"type":1,"prob":99,"string":"f(a)=f(b)=0,f\'(a)f\'(b)>0.","option":"","pos":[{"x":700,"y":1760},{"x":1240,"y":1764},{"x":1239,"y":1808},{"x":699,"y":1804}]},{"type":1,"prob":99,"string":"证明:存在","option":"","pos":[{"x":1239,"y":1767},{"x":1409,"y":1767},{"x":1409,"y":1799},{"x":1239,"y":1799}]},{"type":1,"prob":98,"string":"ξ∈(a,b)","option":"","pos":[{"x":1409,"y":1762},{"x":1566,"y":1762},{"x":1566,"y":1806},{"x":1409,"y":1805}]},{"type":1,"prob":99,"string":"和","option":"","pos":[{"x":77,"y":1822},{"x":123,"y":1822},{"x":123,"y":1855},{"x":77,"y":1855}]},{"type":1,"prob":99,"string":"n∈(a,b),","option":"","pos":[{"x":123,"y":1816},{"x":305,"y":1816},{"x":305,"y":1859},{"x":123,"y":1859}]},{"type":1,"prob":99,"string":"使","option":"","pos":[{"x":305,"y":1822},{"x":349,"y":1822},{"x":349,"y":1854},{"x":305,"y":1854}]},{"type":1,"prob":99,"string":"f(ξ)=0","option":"","pos":[{"x":349,"y":1816},{"x":496,"y":1816},{"x":496,"y":1859},{"x":349,"y":1859}]},{"type":1,"prob":99,"string":"及","option":"","pos":[{"x":496,"y":1821},{"x":541,"y":1821},{"x":541,"y":1854},{"x":496,"y":1854}]},{"type":1,"prob":94,"string":"f\'(n)=0.","option":"","pos":[{"x":541,"y":1818},{"x":719,"y":1817},{"x":719,"y":1858},{"x":541,"y":1859}]}]}]},{"index":1,"type":15,"num\_choices":0,"prob":0,"text":"设f(x)为连续函数,的解y(x),其中a是正常数;(2)若|f(x) |≤k(k\\\\right.为常数),证明:当x≥0时,有$$| y \\\\left( x \\\\right) | \\\\le \\\\frac { k } { a } \\\\left( 1 - e ^ { - a x } \\\\right)$$","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1980},{"x":1654,"y":1980},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":76,"y":1980},{"x":1254,"y":1980},{"x":1254,"y":2258},{"x":76,"y":2258}]],"element\_list":[{"type":0,"text":"设f(x)为连续函数,","pos\_list":[[{"x":77,"y":1980},{"x":395,"y":1980},{"x":395,"y":2011},{"x":77,"y":2010}]],"content\_list":[{"type":1,"prob":96,"string":"设f(x)为连续函数,","option":"","pos":[{"x":77,"y":1980},{"x":395,"y":1980},{"x":395,"y":2011},{"x":77,"y":2010}]}]},{"type":0,"text":"的解y(x),其中a是正常数;","pos\_list":[[{"x":143,"y":2033},{"x":1031,"y":2029},{"x":1031,"y":2158},{"x":143,"y":2162}]],"content\_list":[{"type":1,"prob":100,"string":"","option":"","pos":[{"x":143,"y":2033},{"x":535,"y":2033},{"x":535,"y":2160},{"x":143,"y":2160}]},{"type":1,"prob":99,"string":"的解y(x),其中","option":"","pos":[{"x":599,"y":2073},{"x":847,"y":2072},{"x":848,"y":2104},{"x":599,"y":2105}]},{"type":1,"prob":99,"string":"a","option":"","pos":[{"x":848,"y":2081},{"x":868,"y":2081},{"x":868,"y":2102},{"x":848,"y":2102}]},{"type":1,"prob":99,"string":"是正常数;","option":"","pos":[{"x":867,"y":2072},{"x":1031,"y":2071},{"x":1031,"y":2103},{"x":868,"y":2104}]}]},{"type":0,"text":"(2)若|f(x) |≤k(k\\\\right.为常数),证明:当x≥0时,有$$| y \\\\left( x \\\\right) | \\\\le \\\\frac { k } { a } \\\\left( 1 - e ^ { - a x } \\\\right)$$","pos\_list":[[{"x":77,"y":2173},{"x":1250,"y":2164},{"x":1251,"y":2256},{"x":78,"y":2265}]],"content\_list":[{"type":1,"prob":98,"string":"(2)若","option":"","pos":[{"x":77,"y":2188},{"x":191,"y":2188},{"x":191,"y":2249},{"x":77,"y":2249}]},{"type":1,"prob":95,"string":"|f(x) |≤k(k\\\\right.","option":"","pos":[{"x":191,"y":2187},{"x":407,"y":2187},{"x":407,"y":2234},{"x":191,"y":2234}]},{"type":1,"prob":99,"string":"为常数),证明:当","option":"","pos":[{"x":407,"y":2186},{"x":691,"y":2184},{"x":692,"y":2245},{"x":408,"y":2247}]},{"type":1,"prob":99,"string":"x≥0","option":"","pos":[{"x":691,"y":2191},{"x":782,"y":2190},{"x":782,"y":2228},{"x":692,"y":2229}]},{"type":1,"prob":98,"string":"时,有","option":"","pos":[{"x":782,"y":2183},{"x":891,"y":2183},{"x":891,"y":2244},{"x":782,"y":2244}]},{"type":2,"prob":99,"string":"$$| y \\\\left( x \\\\right) | \\\\le \\\\frac { k } { a } \\\\left( 1 - e ^ { - a x } \\\\right)$$","option":"","pos":[{"x":890,"y":2167},{"x":1250,"y":2164},{"x":1251,"y":2255},{"x":891,"y":2258}]}]}]}]}],"prism\_version":"1.0.9","prism\_wnum":0,"width":1654}', 'RequestId': 'F07BBB4D-B3EE-5B31-BA11-E29B5D9B3650'}}