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3 } } e ^ { \\\\frac { 1 } { 2 } } d x =$$\_\_\_\_","pos\_list":[[{"x":77,"y":670},{"x":456,"y":670},{"x":456,"y":754},{"x":77,"y":754}]],"content\_list":[{"type":2,"prob":99,"string":"$$\\\\left( 1 1 \\\\right) \\\\int \_ { 1 } ^ { 2 } \\\\frac { 1 } { x ^ { 3 } } e ^ { \\\\frac { 1 } { 2 } } d x =$$","option":"","pos":[{"x":77,"y":673},{"x":343,"y":670},{"x":344,"y":750},{"x":78,"y":754}]},{"type":1,"prob":100,"string":"\_\_\_\_","option":"","pos":[{"x":347,"y":719},{"x":456,"y":719},{"x":456,"y":731},{"x":347,"y":731}]}]}]},{"index":1,"type":1,"num\_choices":0,"prob":0,"text":"(12)设f(u,v)为二元可微函数,$$z = f \\\\left( x ^ { y } , y ^ { x } \\\\right) ,$$则$$\\\\frac { a z } { \\\\partial x } =$$\_\_\_\_","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":870,"y":787},{"x":978,"y":787},{"x":978,"y":826},{"x":870,"y":826}]],"pos\_list":[[{"x":78,"y":773},{"x":997,"y":773},{"x":997,"y":843},{"x":78,"y":843}]],"element\_list":[{"type":0,"text":"(12)设f(u,v)为二元可微函数,$$z = f \\\\left( x ^ { y } , y ^ { x } \\\\right) ,$$则$$\\\\frac { a z } { \\\\partial x } =$$\_\_\_\_","pos\_list":[[{"x":79,"y":771},{"x":979,"y":773},{"x":978,"y":843},{"x":79,"y":842}]],"content\_list":[{"type":1,"prob":96,"string":"(12)设f(u,v)为二元可微函数,","option":"","pos":[{"x":79,"y":786},{"x":562,"y":787},{"x":562,"y":827},{"x":79,"y":826}]},{"type":2,"prob":99,"string":"$$z = f \\\\left( x ^ { y } , y ^ { x } \\\\right) ,$$","option":"","pos":[{"x":562,"y":780},{"x":760,"y":781},{"x":760,"y":835},{"x":562,"y":834}]},{"type":1,"prob":99,"string":"则","option":"","pos":[{"x":760,"y":785},{"x":799,"y":785},{"x":799,"y":830},{"x":760,"y":830}]},{"type":2,"prob":87,"string":"$$\\\\frac { a z } { \\\\partial x } 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2 x }$$","option":"","pos":[{"x":659,"y":854},{"x":935,"y":855},{"x":935,"y":906},{"x":658,"y":905}]},{"type":1,"prob":99,"string":"的通解为y=.","option":"","pos":[{"x":935,"y":862},{"x":1250,"y":862},{"x":1250,"y":895},{"x":935,"y":896}]},{"type":1,"prob":100,"string":"\_\_\_\_","option":"","pos":[{"x":1142,"y":885},{"x":1245,"y":886},{"x":1245,"y":898},{"x":1142,"y":897}]}]}]},{"index":3,"type":1,"num\_choices":0,"prob":0,"text":"(14)设曲面∑:|x|+|y|+|z|=1,,则f(x+|y|)dS=\_\_\_\_∑","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":994,"y":924},{"x":1102,"y":924},{"x":1102,"y":968},{"x":994,"y":968}]],"pos\_list":[[{"x":77,"y":911},{"x":1118,"y":911},{"x":1118,"y":988},{"x":77,"y":988}]],"element\_list":[{"type":0,"text":"(14)设曲面∑:|x|+|y|+|z|=1,,则f(x+|y|)dS=\_\_\_\_∑","pos\_list":[[{"x":77,"y":911},{"x":1103,"y":911},{"x":1103,"y":998},{"x":77,"y":998}]],"content\_list":[{"type":1,"prob":99,"string":"(14)设曲面","option":"","pos":[{"x":77,"y":930},{"x":271,"y":930},{"x":271,"y":973},{"x":77,"y":973}]},{"type":1,"prob":95,"string":"∑:|x|+|y|+|z|=1,","option":"","pos":[{"x":271,"y":921},{"x":666,"y":922},{"x":666,"y":972},{"x":271,"y":971}]},{"type":1,"prob":99,"string":",则","option":"","pos":[{"x":667,"y":929},{"x":726,"y":929},{"x":726,"y":972},{"x":667,"y":972}]},{"type":1,"prob":94,"string":"f(x+|y|)dS=","option":"","pos":[{"x":726,"y":912},{"x":990,"y":911},{"x":990,"y":987},{"x":726,"y":988}]},{"type":1,"prob":100,"string":"\_\_\_\_","option":"","pos":[{"x":995,"y":954},{"x":1103,"y":954},{"x":1103,"y":966},{"x":995,"y":966}]},{"type":1,"prob":99,"string":"∑","option":"","pos":[{"x":726,"y":980},{"x":744,"y":980},{"x":744,"y":998},{"x":726,"y":998}]}]}]},{"index":4,"type":15,"num\_choices":0,"prob":0,"text":"","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":955},{"x":1654,"y":955},{"x":1654,"y":1217},{"x":0,"y":1217}]],"pos\_list":[[{"x":86,"y":955},{"x":892,"y":955},{"x":892,"y":1195},{"x":86,"y":1194}]],"element\_list":[]},{"index":5,"type":1,"num\_choices":0,"prob":0,"text":"(16)在区间(0,1)中随机地取两个数,则这两个数之差的绝对值小于 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^ { 2 } y ^ { 2 }$$在区域$$D = \\\\left\\\\{ \\\\left( x , y \\\\right) | x ^ { 2 } + y ^ { 2 } \\\\le 4 , y \\\\ge 0 \\\\right\\\\}$$求函数 上的最大值和最小值.(18)(本题满分10分)计算曲面积分=a dyd+$$I = \\\\int { x z d y } d z + 2 z y d z d x + 3 x y d x d y ,$$其中∑为曲面z=1-$$z = 1 - x ^ { 2 } - \\\\frac { y ^ { 2 } } { 4 } \\\\left( 0 \\\\le z \\\\le 1 \\\\right)$$≤1)的上侧.(19)(本题满分11分)设函数f(x),g(x)在[a,b]上连续,在(a,b)内具有二阶导数且存在相等的最大值,f(a)=g(a),f(b)=g(b),,证明:存在ξ∈(a,b),,使得f\'(ξ)=g\'\'(ξ).(20)(本题满分10分)设幂级数$$\\\\sum \_ { i = - 1 } ^ { \\\\infty } { a \_ { n } x ^ { n } }$$在(-∞,+∞))内收敛,其和函数y(x)满足n=0y\'-2xy\'-4y=0,y(0)=0,y\'(0)=1.(I)证明$$a \_ { n + 2 } = \\\\frac { 2 } { n + 1 } a \_ { n } , n = 1 , 2 , 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\_ { i = - 1 } ^ { \\\\infty } { a \_ { n } x ^ { n } }$$在(-∞,+∞))内收敛,其和函数y(x)满足n=0y\'-2xy\'-4y=0,y(0)=0,y\'(0)=1.","pos\_list":[[{"x":154,"y":1896},{"x":1175,"y":1896},{"x":1175,"y":2034},{"x":154,"y":2034}]],"content\_list":[{"type":1,"prob":99,"string":"设幂级数","option":"","pos":[{"x":154,"y":1912},{"x":312,"y":1912},{"x":312,"y":1961},{"x":154,"y":1961}]},{"type":2,"prob":91,"string":"$$\\\\sum \_ { i = - 1 } ^ { \\\\infty } { a \_ { n } x ^ { n } }$$","option":"","pos":[{"x":312,"y":1896},{"x":431,"y":1896},{"x":431,"y":1975},{"x":312,"y":1975}]},{"type":1,"prob":99,"string":"在","option":"","pos":[{"x":430,"y":1909},{"x":476,"y":1909},{"x":476,"y":1964},{"x":430,"y":1964}]},{"type":1,"prob":99,"string":"(-∞,+∞)","option":"","pos":[{"x":476,"y":1919},{"x":666,"y":1918},{"x":666,"y":1962},{"x":476,"y":1963}]},{"type":1,"prob":99,"string":")内收敛,其和函数y(x)满足","option":"","pos":[{"x":666,"y":1912},{"x":1100,"y":1912},{"x":1100,"y":1961},{"x":666,"y":1961}]},{"type":1,"prob":99,"string":"n=0","option":"","pos":[{"x":310,"y":1967},{"x":355,"y":1966},{"x":355,"y":1981},{"x":310,"y":1982}]},{"type":1,"prob":99,"string":"y\'-2xy\'-4y=0,y(0)=0,y\'(0)=1.","option":"","pos":[{"x":539,"y":1987},{"x":1175,"y":1983},{"x":1175,"y":2030},{"x":539,"y":2034}]}]},{"type":0,"text":"(I)证明$$a \_ { n + 2 } = \\\\frac { 2 } { n + 1 } a \_ { n } , n = 1 , 2 , \\\\cdots$$(Ⅱ)求y(x)的表达式.","pos\_list":[[{"x":156,"y":2042},{"x":703,"y":2038},{"x":704,"y":2164},{"x":157,"y":2168}]],"content\_list":[{"type":1,"prob":95,"string":"(Ⅰ)证明","option":"","pos":[{"x":157,"y":2057},{"x":309,"y":2056},{"x":309,"y":2103},{"x":157,"y":2104}]},{"type":2,"prob":99,"string":"$$a \_ { n + 2 } = \\\\frac { 2 } { n + 1 } a \_ { n } , n = 1 , 2 , \\\\cdots$$","option":"","pos":[{"x":309,"y":2041},{"x":703,"y":2039},{"x":703,"y":2116},{"x":309,"y":2118}]},{"type":1,"prob":99,"string":"(Ⅱ)求y(x)的表达式.","option":"","pos":[{"x":157,"y":2135},{"x":504,"y":2133},{"x":504,"y":2165},{"x":157,"y":2168}]}]}]}]}],"prism\_version":"1.0.9","prism\_wnum":0,"width":1654}', 'RequestId': '58BC7E3E-7020-5C19-9786-5EA43DE5B5D3'}}