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\\\\sin y \\\\frac { \\\\partial z } { \\\\partial y } = \\\\left( 4 z + e ^ { x } \\\\cos y \\\\right) e ^ { x } .$$若f(0)=0,求f(u)的表达式.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":27},{"x":1654,"y":27},{"x":1654,"y":528},{"x":0,"y":528}]],"pos\_list":[[{"x":54,"y":27},{"x":1181,"y":28},{"x":1181,"y":300},{"x":54,"y":300}]],"element\_list":[{"type":0,"text":"(17)(本题满分10分)","pos\_list":[[{"x":54,"y":36},{"x":419,"y":37},{"x":419,"y":69},{"x":54,"y":68}]],"content\_list":[{"type":1,"prob":95,"string":"(17)(本题满分10分)","option":"","pos":[{"x":54,"y":36},{"x":419,"y":37},{"x":419,"y":69},{"x":54,"y":68}]}]},{"type":0,"text":"设函数f(u)具有连续导数,且$$z = f \\\\left( e ^ { x } \\\\cos y \\\\right)$$满足$$\\\\cos y \\\\frac { a z } { \\\\partial x } - \\\\sin y \\\\frac { \\\\partial z } { \\\\partial y } = \\\\left( 4 z + e ^ { x } \\\\cos y \\\\right) e ^ { x } .$$若f(0)=0,求f(u)的表达式.","pos\_list":[[{"x":139,"y":87},{"x":1167,"y":84},{"x":1168,"y":290},{"x":140,"y":293}]],"content\_list":[{"type":1,"prob":99,"string":"设函数f(u)具有连续导数,且","option":"","pos":[{"x":141,"y":91},{"x":625,"y":91},{"x":625,"y":125},{"x":142,"y":126}]},{"type":2,"prob":99,"string":"$$z = f \\\\left( e ^ { x } \\\\cos y \\\\right)$$","option":"","pos":[{"x":625,"y":86},{"x":844,"y":85},{"x":844,"y":133},{"x":625,"y":134}]},{"type":1,"prob":99,"string":"满足","option":"","pos":[{"x":844,"y":90},{"x":932,"y":90},{"x":932,"y":125},{"x":844,"y":125}]},{"type":2,"prob":94,"string":"$$\\\\cos y \\\\frac { a z } { \\\\partial x } - 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a , x \\\\in \\\\left[ a , b \\\\right] ;$$$$\\\\left( H \\\\right) \\\\int \_ { a } ^ { a + \\\\int \_ { a } ^ { b } \\\\left( t \\\\left( \\\\right) \\\\right) d t } { f \\\\left( x \\\\right) } f \\\\left( x \\\\right) d x \\\\le \\\\int { a } ^ { b } f \\\\left( x \\\\right) g \\\\left( x \\\\right) d x .$$","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":958},{"x":1654,"y":958},{"x":1654,"y":1553},{"x":0,"y":1553}]],"pos\_list":[[{"x":50,"y":958},{"x":1446,"y":959},{"x":1446,"y":1268},{"x":50,"y":1268}]],"element\_list":[{"type":0,"text":"(19)(本题满分10分)","pos\_list":[[{"x":54,"y":965},{"x":419,"y":964},{"x":419,"y":996},{"x":54,"y":996}]],"content\_list":[{"type":1,"prob":99,"string":"(19)(本题满分10分)","option":"","pos":[{"x":54,"y":965},{"x":419,"y":964},{"x":419,"y":996},{"x":54,"y":996}]}]},{"type":0,"text":"设函数f(x),g(x)在区间[a,b]上连续,且f(x)单调增加,0≤g(x)≤1.证明:","pos\_list":[[{"x":142,"y":1016},{"x":1432,"y":1012},{"x":1432,"y":1058},{"x":142,"y":1062}]],"content\_list":[{"type":1,"prob":99,"string":"设函数f(x),g(x)在区间[a,b]上连续,且f(x)单调增加,","option":"","pos":[{"x":142,"y":1022},{"x":1099,"y":1018},{"x":1100,"y":1051},{"x":142,"y":1056}]},{"type":1,"prob":99,"string":"0≤g(x)≤1.","option":"","pos":[{"x":1099,"y":1013},{"x":1340,"y":1012},{"x":1340,"y":1058},{"x":1100,"y":1059}]},{"type":1,"prob":99,"string":"证明:","option":"","pos":[{"x":1340,"y":1016},{"x":1432,"y":1016},{"x":1432,"y":1050},{"x":1340,"y":1050}]}]},{"type":0,"text":"$$\\\\left( I \\\\right) 0 \\\\le \\\\int \_ { a } ^ { x } g \\\\left( t \\\\right) d t \\\\le x - 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