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1 , 0 , 1 \\\\right) , Y$$的概率密度为$$f \_ { r } \\\\left( y \\\\right) = \\\\left\\\\{ \\\\begin{array}{l} 1 , 0 \\\\le y < 1 , \\\\\\\\ 0 \\\\end{array} \\\\right.$$记Z=X+Y.(1)求$$P \\\\left( z \\\\le \\\\frac { 1 } { 2 } | x = 0 \\\\right. \\\\right\\\\} ;$$(Ⅱ)求Z的概率密度$$f \_ { z } \\\\left( z \\\\right) .$$(23)(本题满分11分)设$$X \_ { 1 } , X \_ { 2 } , \\\\cdots , X \_ { n }$$是总体$$N \\\\left( \\\\mu , \\\\sigma ^ { 2 } \\\\right)$$的简单随机样本,记$$\\\\overline { X } = \\\\frac { 1 } { n } \\\\sum \_ { i = 1 } ^ { n } X \_ { i } , s ^ { 2 } = \\\\frac { 1 } { n - 1 } \\\\sum \_ { i = 1 } ^ { n } \\\\left( X \_ { i } - \\\\overline { x } \\\\right) ^ { 2 } ,$$$$T = \\\\overline { X } ^ { 2 } - \\\\frac { 1 } { n } S ^ { 2 }$$(I)证明T是$$- \\\\mu ^ { 2 }$$的无偏估计量;(Ⅱ)当\\\\mu=0,σ=1时,求D(T).","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":128},{"x":1654,"y":128},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":77,"y":128},{"x":1571,"y":128},{"x":1571,"y":823},{"x":78,"y":823}]],"element\_list":[{"type":0,"text":"(22)(本题满分11分)","pos\_list":[[{"x":78,"y":130},{"x":422,"y":128},{"x":422,"y":160},{"x":78,"y":161}]],"content\_list":[{"type":1,"prob":99,"string":"(22)(本题满分11分)","option":"","pos":[{"x":78,"y":130},{"x":422,"y":128},{"x":422,"y":160},{"x":78,"y":161}]}]},{"type":0,"text":"设随机变量X与Y相互独立,X的概率分布为$$P \\\\left\\\\{ X = i \\\\right\\\\} = \\\\frac { 1 } { 3 } \\\\left( i = - 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