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,$$","option":"","pos":[{"x":1076,"y":445},{"x":1354,"y":444},{"x":1354,"y":488},{"x":1077,"y":489}]},{"type":1,"prob":98,"string":"则线性方程组","option":"","pos":[{"x":1354,"y":444},{"x":1595,"y":443},{"x":1595,"y":477},{"x":1354,"y":478}]},{"type":1,"prob":99,"string":"Ax=0","option":"","pos":[{"x":138,"y":500},{"x":249,"y":500},{"x":249,"y":537},{"x":138,"y":537}]},{"type":1,"prob":99,"string":"的通解为.","option":"","pos":[{"x":249,"y":503},{"x":525,"y":503},{"x":525,"y":535},{"x":249,"y":535}]},{"type":1,"prob":100,"string":"\_\_\_\_","option":"","pos":[{"x":404,"y":525},{"x":514,"y":526},{"x":514,"y":538},{"x":404,"y":537}]}]}]},{"index":5,"type":1,"num\_choices":0,"prob":0,"text":"(14)设随机变量X的概率密度为f(x<x<2,F(x)为X的分布函数,E(X)为X的数学期望,则P{F(X)>E(X)-1}=.\_\_\_\_","figure\_list":[],"table\_list":[[{"x":716,"y":564},{"x":982,"y":564},{"x":982,"y":700},{"x":716,"y":700}]],"answer\_list":[[{"x":786,"y":708},{"x":897,"y":708},{"x":897,"y":748},{"x":786,"y":748}]],"pos\_list":[[{"x":50,"y":547},{"x":1599,"y":547},{"x":1599,"y":752},{"x":50,"y":752}]],"element\_list":[{"type":0,"text":"(14)设随机变量X的概率密度为f(x<x<2,F(x)为X的分布函数,E(X)为X的数学期望,则P{F(X)>E(X)-1}=.\_\_\_\_","pos\_list":[[{"x":53,"y":562},{"x":1594,"y":565},{"x":1594,"y":754},{"x":53,"y":751}]],"content\_list":[{"type":1,"prob":98,"string":"(14)设随机变量X的概率密度为f(x","option":"","pos":[{"x":53,"y":602},{"x":644,"y":603},{"x":644,"y":635},{"x":53,"y":633}]},{"type":1,"prob":100,"string":"","option":"","pos":[{"x":716,"y":564},{"x":982,"y":564},{"x":982,"y":700},{"x":716,"y":700}]},{"type":1,"prob":99,"string":"<x<2,F(x)为X的分布函数,E(X)为X的","option":"","pos":[{"x":833,"y":594},{"x":1594,"y":598},{"x":1594,"y":635},{"x":833,"y":631}]},{"type":1,"prob":99,"string":"数学期望,则","option":"","pos":[{"x":139,"y":712},{"x":363,"y":712},{"x":363,"y":746},{"x":139,"y":746}]},{"type":1,"prob":99,"string":"P{F(X)>E(X)-1}=","option":"","pos":[{"x":363,"y":706},{"x":774,"y":707},{"x":773,"y":752},{"x":363,"y":752}]},{"type":1,"prob":90,"string":".","option":"","pos":[{"x":774,"y":712},{"x":905,"y":712},{"x":905,"y":747},{"x":774,"y":747}]},{"type":1,"prob":100,"string":"\_\_\_\_","option":"","pos":[{"x":788,"y":735},{"x":896,"y":735},{"x":896,"y":747},{"x":788,"y":747}]}]}]}]},{"part\_title":"三、解答题(本题共9小题,共94分,解答应写出文字说明、证明过程或演算步骤.)(15)(本题满分10分)","pos\_list":[[{"x":53,"y":823},{"x":1595,"y":824},{"x":1595,"y":1820},{"x":53,"y":1822}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"设函数y(x)是微分方程$$y ^ { \\\\prime } + x y = e ^ { - \\\\frac { x ^ { 2 } } { 2 } }$$满足条件y(0)=0的特解.(I)求y(x);(Ⅱ)求曲线y=y(x)的凹凸区间及拐点.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":931},{"x":1654,"y":931},{"x":1654,"y":1538},{"x":0,"y":1538}]],"pos\_list":[[{"x":83,"y":931},{"x":1225,"y":931},{"x":1225,"y":1102},{"x":83,"y":1102}]],"element\_list":[{"type":0,"text":"设函数y(x)是微分方程$$y ^ { \\\\prime } + x y = e ^ { - \\\\frac { x ^ { 2 } } { 2 } }$$满足条件y(0)=0的特解.","pos\_list":[[{"x":141,"y":936},{"x":1211,"y":933},{"x":1212,"y":991},{"x":141,"y":994}]],"content\_list":[{"type":1,"prob":99,"string":"设函数y(x)是微分方程","option":"","pos":[{"x":141,"y":948},{"x":539,"y":947},{"x":539,"y":984},{"x":141,"y":985}]},{"type":2,"prob":97,"string":"$$y ^ { \\\\prime } + x y = e ^ { - \\\\frac { x ^ { 2 } } { 2 } 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= 2 + a x ^ { 2 } + b y ^ { 2 }$$在点(3,4)处的方向导数中,沿方向l=-3i-4j的方向导数最大,最大值为10.(I)求a,b;(Ⅱ)求曲面$$z = 2 + a x ^ { 2 } + b y ^ { 2 } \\\\left( z \\\\ge 0 \\\\right)$$的面积.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1538},{"x":1654,"y":1538},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":50,"y":1538},{"x":1596,"y":1538},{"x":1596,"y":1831},{"x":50,"y":1831}]],"element\_list":[{"type":0,"text":"(16)(本题满分10分)","pos\_list":[[{"x":53,"y":1559},{"x":418,"y":1559},{"x":418,"y":1591},{"x":53,"y":1591}]],"content\_list":[{"type":1,"prob":99,"string":"(16)(本题满分10分)","option":"","pos":[{"x":53,"y":1559},{"x":418,"y":1559},{"x":418,"y":1591},{"x":53,"y":1591}]}]},{"type":0,"text":"设a,b为实数,函数$$z = 2 + a x ^ { 2 } + b y ^ { 2 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