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= \\\\left( \_ { 1 0 } ^ { 1 } a \_ { 0 } , B = \\\\left( \_ { 1 } ^ { 0 } , \\\\frac { 1 } { b } \\\\right)$$当a,b为何值时,存在矩阵C使得AC-CA=B,并求所有矩阵C.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":720},{"x":1654,"y":720},{"x":1654,"y":1329},{"x":0,"y":1329}]],"pos\_list":[[{"x":52,"y":720},{"x":1596,"y":720},{"x":1596,"y":965},{"x":52,"y":965}]],"element\_list":[{"type":0,"text":"(22)(本题满分11分)","pos\_list":[[{"x":54,"y":744},{"x":423,"y":745},{"x":423,"y":776},{"x":54,"y":775}]],"content\_list":[{"type":1,"prob":97,"string":"(22)(本题满分11分)","option":"","pos":[{"x":54,"y":744},{"x":423,"y":745},{"x":423,"y":776},{"x":54,"y":775}]}]},{"type":0,"text":"$$A = \\\\left( \_ { 1 0 } ^ { 1 } a \_ { 0 } , B = \\\\left( \_ { 1 } ^ { 0 } , \\\\frac { 1 } { b } \\\\right)$$当a,b为何值时,存在矩阵C使得AC-CA=B,并求所有矩阵C.","pos\_list":[[{"x":142,"y":788},{"x":1595,"y":785},{"x":1596,"y":939},{"x":142,"y":942}]],"content\_list":[{"type":2,"prob":87,"string":"$$A = \\\\left( \_ { 1 0 } ^ { 1 } a \_ { 0 } , 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1 } + a \_ { 2 } x \_ { 2 } + a \_ { 3 } x \_ { 3 } \\\\right) + \\\\left( b \_ { 1 } x + b \_ { 2 } x \_ { 2 } + b \_ { 3 } x \_ { 3 } \\\\right) ^ { 2 } ,$$(I)证明二次型f对应的矩阵为$$2 \\\\alpha \\\\alpha ^ { T } + \\\\beta \\\\beta ^ { T } ;$$(Ⅱ)若α,β正交且均为单位向量,证明4在正交变换下的标准形为:$$2 y \_ { 1 } ^ { 2 } + y \_ { 2 } ^ { 2 }$$","figure\_list":[[{"x":659,"y":1457},{"x":1074,"y":1457},{"x":1074,"y":1623},{"x":659,"y":1623}]],"table\_list":[],"answer\_list":[[{"x":0,"y":1329},{"x":1654,"y":1329},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":54,"y":1329},{"x":1386,"y":1329},{"x":1386,"y":1757},{"x":54,"y":1757}]],"element\_list":[{"type":0,"text":"(23)(本题满分11分)","pos\_list":[[{"x":54,"y":1352},{"x":423,"y":1353},{"x":423,"y":1384},{"x":54,"y":1383}]],"content\_list":[{"type":1,"prob":99,"string":"(23)(本题满分11分)","option":"","pos":[{"x":54,"y":1352},{"x":423,"y":1353},{"x":423,"y":1384},{"x":54,"y":1383}]}]},{"type":0,"text":"设二次型 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