Ideals In Matrix Rings Over Commutative Rings

Title	Ideals In Matrix Rings Over Commutative Rings
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Abstract	In this research, we discuss about ideal of matrix rings over commutative rings and its properties. The research of ideal in matrix rings is important because it is the basic structure for constructing factor rings in matrix rings. This research is a literature research that examines and develops research that has been done previously. We develop ideal concepts in an usually ring into matrix rings over commutative rings. By showing the sufficient and necessary condition of ideal of matrix rings over commutative rings, we show the form of ideal in matrix rings over commutative rings. Then, by using the properties of two ideal in a ring, we show the properties of intersection, addition and multiplication of two ideal in matrix rings over commutative rings. The result of this research is the form of ideal in matrix rings over commutative rings is the set of all matrices over the ideal in commutative rings. Then, the intersection, addition and multiplication of two ideal in matrix rings over commutative rings is also an ideal of matrix rings over commutative rings.
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