|  |  |
| --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Matrices and determinants

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | K |  |  |  | 2  U |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | E |  |  |  | P |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | W |  |  |  | P |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 3  I | N | C | O | N | S | I | S | T | E | N | C | Y |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 4  S |  |  |  | M |  |  |  | T |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Q |  | 5  S | Y | M | M | E | T | R | I | C | M | A | T | R | I | X |  |  |  |
|  |  |  |  |  |  |  |  |  |  | U |  |  |  | E |  |  |  | I |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | A |  |  |  | T |  | 6  S | C | A | L | A | R | M | A | T | R | I | X |  |  |
|  |  |  |  |  |  |  |  |  |  | R |  |  |  | R |  |  |  | G |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 7  L | O | W | E | R | T | R | I | A | N | G | U | L | A | R | M | A | T | R | I | X |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | C |  |  |  | L |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | M |  |  |  | A |  | 8  Z |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 9  S | A | M | E | O | R | D | E | R |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | T |  |  |  | M |  | R |  |  |  |  |  |  |  |  |  |
|  |  |  | 10  S | I | N | G | U | L | A | R | M | A | T | R | I | X |  | A |  | O |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  | T |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- |
| **Across**  **3.** lAl=0 and adjA.B not equal to zero  **5.** A=A'  **6.** Diagonal matrix having same elements in principle diagonal  **7.** Elements present above the principle diagonal are zeroes in a square matrix  **9.** Condition for matrices add and subtraction  **10.** Determinant of A equal to zero | **Down**  **1.** A=-A'  **2.** Elements present below the principle diagonal are zeros in a square matrix  **4.** Matrix contains equal number of rows and columns  **8.** Value of determinant having identical rows |