The formula is centered around a different equation of view.

\[ \text{or,} \quad X_1 + S + r = \ldots (\text{H}_{1-2} \cdot \text{P} - S) \]

Show that this process gives either directly that the paper is open

\[ X_1 + S + r = \ldots (\text{H}_{1-2} \cdot \text{P} - S) = \ldots X \]

where

\[ \begin{bmatrix} \alpha & X_1 + S + r \\ \mu & \lambda \end{bmatrix} = X \]

Similarly, if and are both necessary, prove that

\[ X_1 + S + r = \ldots (\text{H}_{1-2} \cdot \text{P} - S) = \ldots X \]

where

\[ \begin{bmatrix} \alpha & X_1 + S + r \\ \mu & \lambda \end{bmatrix} = X \]

where \( \alpha \) and \( \beta \) are proportional to each other.

\[ \begin{bmatrix} S & \alpha \\ \beta & d \end{bmatrix} = \lambda \]

If \( \alpha \neq 0 \) is a monotonous, show by induction that for positive integers

**Problems 1.6**

**Miscellaneous Problems**

1. Suppose that \( M \) is a linear matrix with \( \text{det} M = 0 \). Find that \( \text{det} M + 1 \).

2. Find all matrices \( B \) for which \( \text{det} B = 0 \).

3. Find all matrices \( A \) for which \( \text{det} A = 0 \).

4. Show by induction that \( \text{det} A_n = \text{det} A \).

5. Let \( a \neq 0 \) be a monotonous, show by induction that for positive integers
\[
\begin{pmatrix}
0 & 1 \\
1 & 0 \\
\end{pmatrix}
\]

(a) Verify that \( L \) is both a left and a right-inverse of \( A \).
(b) Show that for matrices \( A \) and \( D \):

\[
L \bigoplus 0 = 0 \bigoplus L
\]

(c) Let \( A \) and \( L \) be matrices, and \( D \)

\[
\begin{pmatrix}
A & D \\
\end{pmatrix}
\]

\[
= L
\]

(d) Show that for all matrices \( L \) and \( D \)

\[
\begin{pmatrix}
L & D \\
\end{pmatrix}
\]

\[
= L
\]

(e) Let \( A \times L \) be the product of the matrices \( A \) and \( L \). Show that for all matrices \( L \) and \( D \)

\[
\begin{pmatrix}
L & D \\
\end{pmatrix}
\]

\[
= L
\]

(f) Consider the kronecker product \( A \otimes C \) defined in Problem 10 of Section 1.1.

\[
A \otimes C
\]

\[
= C
\]

(g) Consider the symmetric matrix \( L \times L \times L \) and its inverse.

\[
L
\]

\[
= L
\]

(h) Consider the kronecker product \( A \otimes C \) defined in Section 1.1.

\[
A \otimes C
\]

\[
= C
\]

(i) Consider the kronecker product \( A \otimes C \) defined in Section 1.1.

\[
A \otimes C
\]

\[
= C
\]

(j) Consider the kronecker product \( A \otimes C \) defined in Section 1.1.

\[
A \otimes C
\]

\[
= C
\]

(k) Consider the kronecker product \( A \otimes C \) defined in Section 1.1.

\[
A \otimes C
\]

\[
= C
\]

(l) Consider the kronecker product \( A \otimes C \) defined in Section 1.1.

\[
A \otimes C
\]

\[
= C
\]