The matrix

$$
A=\left[\begin{array}{ccc}
-2 & -2 & 2 \\
0 & 2 & 0 \\
-4 & 0 & 2
\end{array}\right]
$$

has one real eigenvalue．Find this eigenvalue，its multiplicity，and the dimension of the corre－ sponding eigenspace．
The eigenvalue $=\square$ has multiplicity $=\square$ and the dimension of the corre－
sponding eigenspace is $\square$

Is the matrix $A$ defective？
$?$

The matrix

$$
A=\left[\begin{array}{ccc}
-2 & -2 & 2 \\
0 & 2 & 0 \\
-4 & 0 & 2
\end{array}\right]
$$

has one real eigenvalue．Find this eigenvalue，its multiplicity，and the dimension of the corre－ sponding eigenspace．

The eigenvalue $=\square 2$ has multiplicity $=\square 1$ and the dimension of the corre－
sponding eigenspace is 1 ．
Is the matrix $A$ defective？
defective

