# hoin group: time/Noudist CLICK TO DOWNLOAD MORE TMA PQ 

 transformationzero
[MTH212] Let $U$ and $V$ be vector spaces over a field $F$, and let $\backslash(T: U \backslash t o \backslash V)$ be a oneone and onto linear transformation. The T is called Isomorphism
[MTH212] Consider the function $\backslash\left(T: R^{\wedge}\{2\} \backslash t o \backslash R^{\wedge}\{2\}: \\right) \backslash(T \backslash$ left $(x, y \backslash \mid$ right $)=\backslash \backslash$ left $(x,-y \backslash$ right $) \backslash)$ is reflection
[MTH212] Let $\sim\left(T: R^{\wedge}\{2\} \mid t o R^{\wedge}\{2\}\right) \sim$ be the transformation~ $~ \\left(T \backslash l e f t\left(x \_\{1\}, x \_\{2\}\right.\right.$ right) $=$ Veft( x \{1\},0\right) $)$ ). The null space (or kernel) $\sim \sim \mathrm{of} \sim(\mathrm{T}) \sim$ is <br>(left( $0, \mathrm{x}_{-}\{2\}$ |right) ) $)$
[MTH212] Let $\backslash(T: \backslash U \backslash \backslash t o \backslash V)$ be defined by $T(u)=u$ for all $\backslash(u \backslash \operatorname{lin} \backslash U \backslash)$. Then $T$ is a $\overline{\text { Identity }}$ transformation
[MTH212] Let $\backslash\left(F: R^{\wedge}\{4\} \backslash\right.$ to $\left.R^{\wedge}\{3\} \backslash\right)$ defined by $\backslash(F \backslash \operatorname{left}(x, y, z, t$ tright $)=V$ eft $(x-y+z+t, \backslash x+2 z-t, \backslash$ $x+y+3 z-3 t$ lright). $\backslash$ ) Find $\backslash(F(0,0,0,1) \backslash)$ (1,-1,-3)
[MTH212] Consider the function $\backslash\left(p: R^{\wedge}\{3\} \backslash t o \backslash R^{\wedge}\{2\}: 1\right) \backslash(p \backslash$ left $(x, y, z \backslash$ right $)=\ \backslash$ left $(x, y \backslash$ right $))$ is a $\qquad$ from $\backslash\left(R^{\wedge}\{3\} \backslash\right)$ on to the $x y$-plane
projection
[MTH212] Let $\backslash\left(L: R^{\wedge}\{3\} \backslash\right.$ to $\left.\backslash R \backslash\right)$ be the map given by $\backslash(L(x, y, z) \backslash=\mid x \backslash+\backslash y \backslash+\backslash z \backslash)$. What is nullity (L)?
2
[MTH212] Consider the linear transformation defined by $\backslash(F \backslash$ left $(x, y, z \backslash$ right $)=$ left $(y z$, $x^{\wedge}\{2\}$ |right $) . \backslash \backslash$ Find $(F(2,3,4) \backslash)$ $(12,4)$
[MTH212] Let $\backslash\left(F: R^{\wedge}\{3\} \mid t o \backslash R^{\wedge}\{2\}\right)$ and $\backslash\left(G: R^{\wedge}\{3\} \backslash t o \backslash R^{\wedge}\{2\}\right)$ be defined by $\backslash(F \backslash$ eft $(x, y$, $z \backslash$ right $)=\$ left $(2 x, y+z \mid$ right $) \backslash$ ) and $\backslash(F \mid$ left $(x, y, z \backslash$ right $)=\$ left $(x-z, y \backslash$ right $) \backslash$, determine $F+G$ l(left(3x-z,2y+z|right))

## Whatsapp: 08089722160 or click here for TMA assistance

