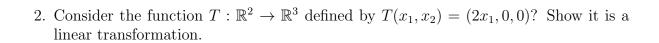
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• (Sec. 3.1) linear transformation, rank, nullity.

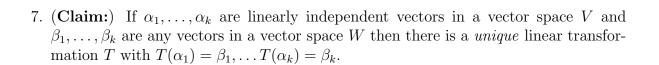
## LARSON—MATH 610—CLASSROOM WORKSHEET 18 Linear Transformations.

## Concepts & Notation

1.	What is a linea	r transformation	T from	a vector spac	e V int	o a vector	space	W?
	What is the <i>nul</i>	$l \ space \ of \ T$ ? What	at is the	$range  ext{ of } T?$				



- 3. Find the null space of T.
- 4. What is the *nullity* of T?
- 5. Find the range of T.
- 6. What is the rank of T?



8. (Rank-Nullity Theorem:) If V is a finite-dimensional vector space then rank(V) + nullity(V) = dim(V).