Assignment on Linear transformation by joseph Michael ogirima 19/sci01/098

Question 1:

Linear transformation is a function from one vector space to another that respects the underlying structure of each vector space.

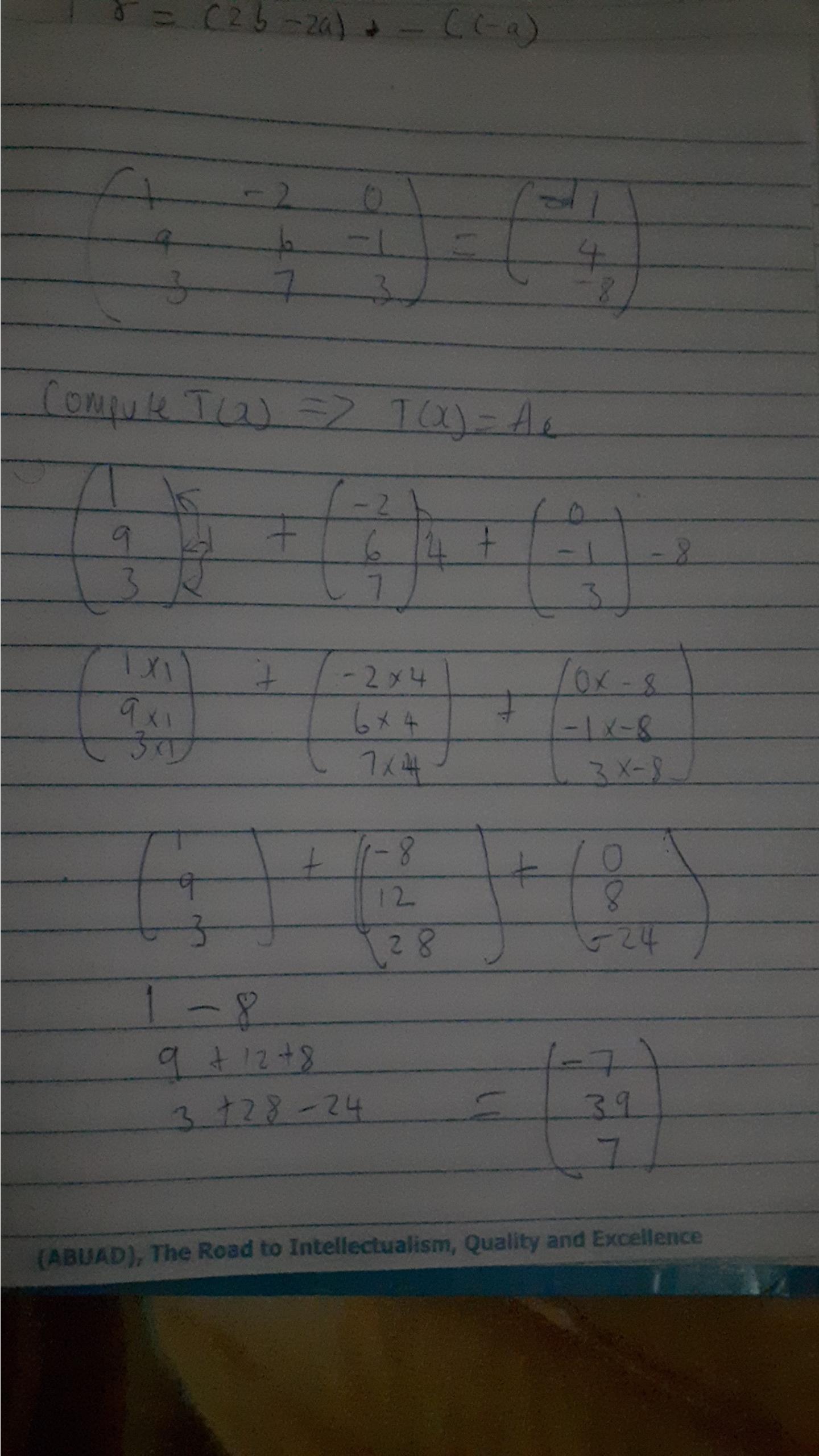
Examples;

1. For all x, y , £ V T (x + y) = T(x) + T(y) (T is addictive)
2. X £ V r £ R T (Rx =rt(x) ( T is homogeneous).

Question2:

Given the linear transformation of matrix operator on a vector X compute T(x)

If A(1,9,3) (-2,6,7) (0,-1,3)



1. X Question 3 ;

Rank of a matrix is the maximum number of linearly independent rows in a matrix A is called the row rank of A and the maximum number linearly independent columns in A is called the column rank of A. Example of a rank matrix

