

## Step-1

We have to explain that why  $A$ , and  $-A$  have the same reduced echelon form  $R$ .

If we multiply all rows of  $A$  with  $-1$  then we have  $-A$ .

And if we multiply all rows of  $-A$  with  $-1$  then we have  $A$ .

## Step-2

Therefore by elementary row operation (not interchanging the rows) convert  $A$  to  $-A$  and  $-A$  to  $A$ .

Therefore the reduced echelon form for  $A$  and  $-A$  is  $R$ .