Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Group\_\_\_\_\_\_\_\_\_\_

**Each question is for 10 points**

Consider a linear transformation *h* of determined by these two.

 

1. Represent this transformation with respect to the standard bases.
2. Where does the transformation send this vector? 
3. Find RepB,D(*h*) given that  
4. Using the above *B*, find RepB,B(*h*).