Name:

1. [3pts] Find the dot product of the following:
   1. ,
   2. ,
   3. ,
2. [3pts] Solve the lights out problem for:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| \* |  |  | \* |  |
|  | \* |  |  |  |
|  | \* |  |  |  |
|  |  |  |  |  |
|  |  | \* | \* |  |

1. [4pts] Show that for 2-vectors in *GF*(2) if the dot product ( and if and then