In this worksheet we are trying to figure out how to "input" vectors and then how to "take" the Dot Product and the Cross Product of the vectors.

We are also exploring the HELP SCREEN in order to discover the correct syntax for our assignment.

What's a vector?
We tried "looking-up" a vector, and here's what we found --

```maple
> al:=array(1..3,[1,2,3]);
   al := [1, 2, 3]

> sally:=array(1..3,[2,0,5]);
   sally := [2, 0, 5]

> al+sally;
   al + sally

> al + sally;
   al + sally
```
The "al" and "sally" method of defining vectors didn't seem to work, so we tried a different way.... See below.

Define vectors:
> bill := <1,2,3>;  
  \[ bill := e_x + 2 e_y + 3 e_z \]
> helen := <2,0,5>;  
  \[ helen := 2 e_x + 5 e_z \]

So we can add the vectors. Notice how the "plus" can be spaced:
> bill+helen;  
  \[ 3 e_x + 2 e_y + 8 e_z \]
> bill + helen;  
  \[ 3 e_x + 2 e_y + 8 e_z \]

How about dot products?
> ?dotproduct;  
> bill.helen;  
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How about cross products?
> ?crossproduct;  
> ?vectorproduct;  
> bill &x helen;  
  \[ 10 e_x + e_y - 4 e_z \]

That's all we had time for today.....