

CSE420
Samuel Marujo
Professor Yu
Lab 06

Normals

In this part of the lab, it was basic math. After some contemplation of calculations to this lab, and adding in the various equations given, the result was the following: Because of this change to the functions and the addition of the figure, I believe I was able to accomplish this task successfully, since there were no errors and the display window was changed. Here are my results for this program:

Given:

$$A = (3,0,2)$$

$$B = (4,1,8)$$

Find $A \times B$, $B \times A$, $A \cdot B$:

$A \times B$:

$$-2i + 16j + 3k$$

$B \times A$:

$$2i - 16j - 3k$$

$A \cdot B$:

$$12 + 0 + 16 = 28$$

Normal:

With the given vectors $(1,1,1)$, $(1,2,1)$, and $(3,0,4)$, the normal of these vectors is:

$$(8) \cdot 1 + (4-3) \cdot 1 + (0-6) \cdot 1 = 8 + 1 - 6 = 3$$

Therefore the answer is 3.