Math 210 F1 S98 — Calculus III — Home Quiz #1 — Hanson

Show your own work on this sheet in about 15 minutes (10pts/ques).

Sign your name to testify that this is your own work:

Name ________________________________. *SocSecNo.* ________________________.

1. Describe the region of R^3 represented by $x^2 + z^2 \leq 2$ and $0 \leq y \leq 3$, including a sketch.

2. Find $|\vec{a}|$, $|\vec{b}|$, and $\vec{a} - 2\vec{b}$ if $\vec{a} =< 3, -4, 5 >$ and $\vec{b} =< 2, 3, -1 >$.

3. Find $\vec{a} \bullet \vec{b}$, if $\vec{a} =< 3, -4, 5 >$ and $\vec{b} =< 2, 3, -1 >$.

4. Find $\vec{a} \times \vec{b}$, if $\vec{a} =< 3, -4, 5 >$ and $\vec{b} =< 2, 3, -1 >$.