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Math 208 Quiz 1

Name:\_\_\_\_\_PIN(in any 4 digits):\_\_\_\_\_Score:\_\_\_\_\_

**Instructions:** You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

1. (2) Find the distance between two points  $A(0, 1, -1), B(3, 2, -1)$ .
2. (2) Find a vector perpendicular to  $\langle 1, 1, 1 \rangle$ .
3. (4) Find the component of vector  $\mathbf{a} = \langle 1, 3, 2 \rangle$  in vector  $\vec{b} = \langle -1, 0, 1 \rangle$ ,  $\text{comp}_{\vec{b}} \vec{a}$ .
4. (4) Find the angle between  $\langle 1, 2, 3 \rangle$  and  $\langle 3, 2, 1 \rangle$ .
5. (4) Find a set of parametric equations for the line through two points  $(0, -1, 0)$  and  $(1, 1, 1)$ .
6. (4) Find the area of the triangle with vertexes  $P(0, 1, 2), Q(1, 2, 3), R(2, 3, 4)$ .

END