MA 227-103 — Summer 2017 — Dr. Clontz

Name:	Exercise Type:	
J#:	Quiz	
Date: 2017 June 05		
Standard: This student is able to		Mark:
S01: 3DSpace. Plot and analyze points and vectors in three-dimensional Euclidean space.		
3/3 * reat	tempt due on:	

In xyz space, sketch the vector $\mathbf{v} = \langle 1, 3, 0 \rangle$, the vector \mathbf{w} pointing from $\langle 1, 3, 0 \rangle$ to $\langle 1, 3, 4 \rangle$, and the vector $\mathbf{v} + \mathbf{w}$.

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Standard: This student is able to		Mark:
S02: DotProd. Compute and apply the vectors.	ne dot product of two	
2/3	* reattempt due on:	

Find the work done by a force of 6 units over a distance of 4 units, assuming that the force vector is applied at an angle of $\pi/3$ radians from the displacement vector.

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Standard: This student is able to S03: CrossProd. Compute and apply the cross product of		Mark:
two vectors. $1/3 * reat$	tempt due on:	

Prove that $\hat{\imath} \times \hat{k} = -\hat{\jmath}$, either by computing the cross product directly, or by using $\mathbf{v} \times \mathbf{w} = (\|\mathbf{v}\| \|\mathbf{w}\| \sin \theta) \mathbf{n}$.