

171-MATH 201.

Quiz2 (Sections 10.3, 10.4, 12.3)

1. Find the area of the region that lies inside both the curves, $r = \sin 2\theta$ and $r = \cos 2\theta$.
2. Find the tangent line to the curve $r = \sin(\theta/3)$ at $\theta = \pi/2$.
3. Find the three angles of the triangle with the vertices, $(1,0,-1)$, $(3,-2,0)$, and $(1,3,3)$.
4. Find a unit vector that is orthogonal to both $2\mathbf{i} + 3\mathbf{j} - \mathbf{k}$ and $\mathbf{i} - 2\mathbf{j} + 2\mathbf{k}$.
5. Find the scalar and vector projections of $\mathbf{b} = \langle -1, 4, 8 \rangle$ onto $\mathbf{a} = \langle 3, -1, 1 \rangle$.

Due: Sunday 15 Oct, in class.

Absence = 0. No makeup Quiz.

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