

"QUIZ" for Lecture 17

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E-MAIL SCANNED .pdf OF COMPLETED QUIZ to DrZcalc3@gmail.com (Attachment: q17FirstLast.pdf) ASAP BUT NO LATER THAN Nov. 5, 8:00pm

1. Sketch the vector planar vector field

$$\mathbf{F} = \langle x, y^2 \rangle .$$

Didn't Learn

2. Find a potential function for the vector field \mathbf{F}

$$\mathbf{F} = \langle y \cos(xy), x \cos(xy) \rangle .$$

$$\begin{array}{l} i \\ \frac{d}{dx} \end{array} \begin{array}{l} j \\ \frac{d}{dy} \end{array} = \left(\begin{array}{l} \cos(xy) + x - \sin(xy) \cdot y \\ -(\cos(xy) + y - \sin(xy) \cdot x) \end{array} \right) \Bigg|_{y \cos(xy)}$$

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