Multivariable Calculus

Math 212 Spring 2015 Fowler 309 MWF 9:35am - 10:30am

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Contours and Surfaces

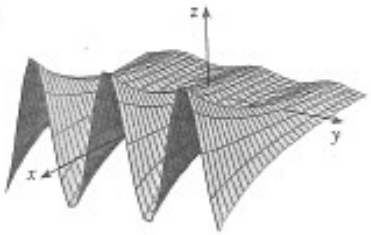
Consider the following functions:

1. $z = \sin(xy)$ **2.** $z = \sin(x - y)$ **3.** $z = (1 - x^2)(1 - y^2)$

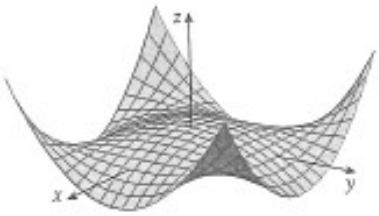
4. $z = \dfrac{x - y}{1 + x^2 + y^2}$ **5.** $z = e^x \cos(y)$ **6.** $z = \sin x - \sin y$

Match the contours (I-VI) to the following surfaces (A-F) and the corresponding formulas (1-6)

A



B



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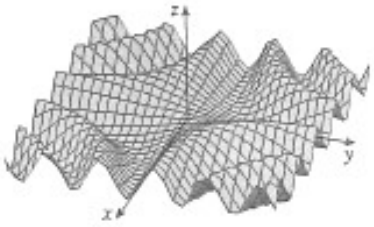
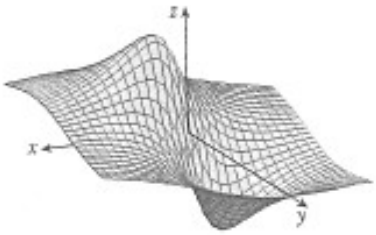
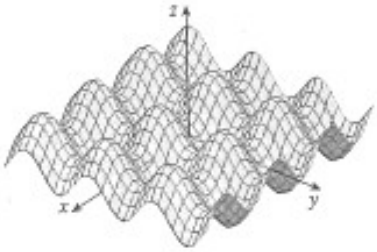


D



E



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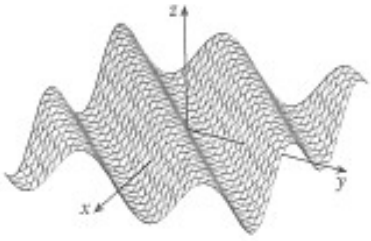
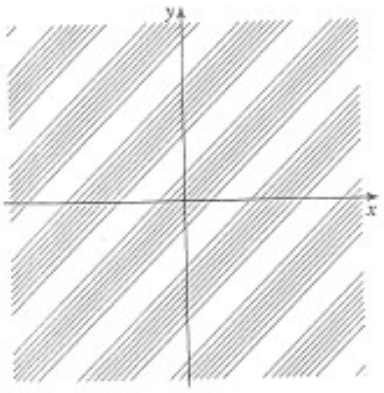


I



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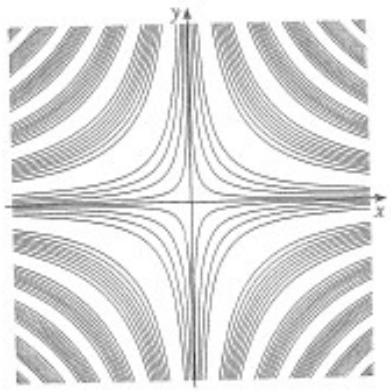

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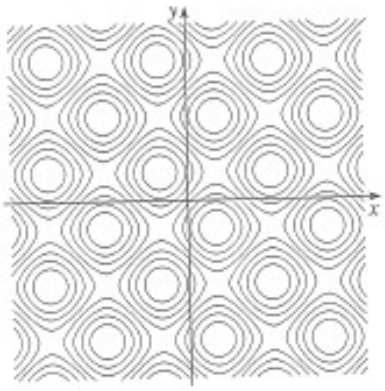

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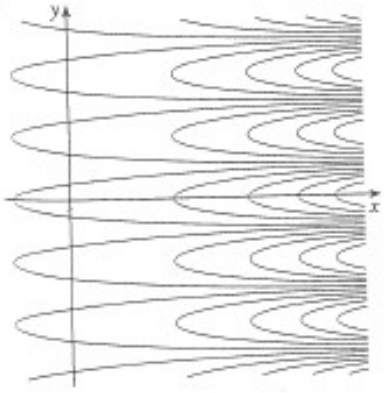

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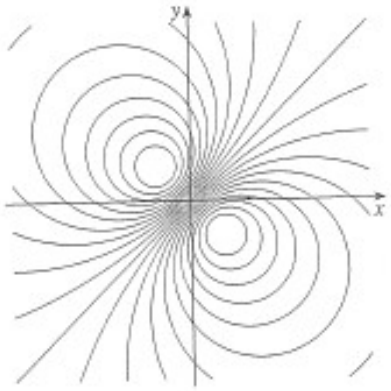

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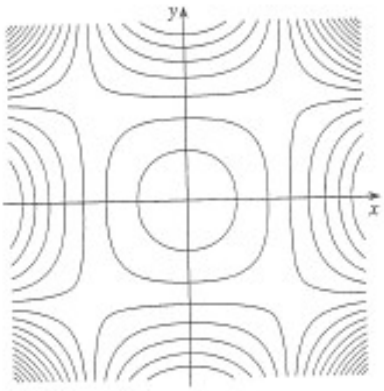


Function **Contour** **Surface**

1. $z = \sin(xy)$

2. $z = \sin(x - y)$

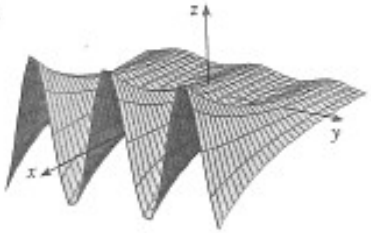
3. $z = (1 - x^2)(1 - y^2)$

4. $z = \dfrac{x - y}{1 + x^2 + y^2}$

5. $z = e^x \cos(y)$

6. $z = \sin x - \sin y$

A



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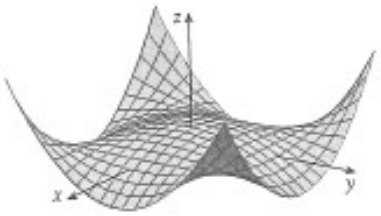

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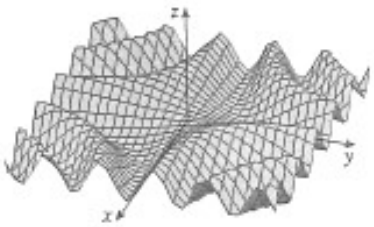

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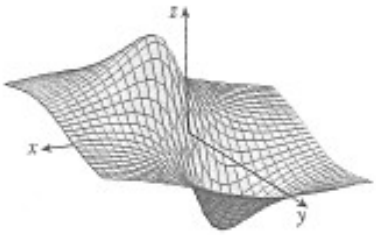

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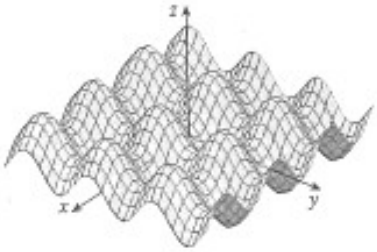

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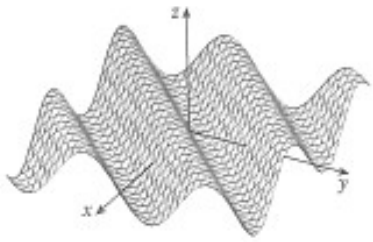

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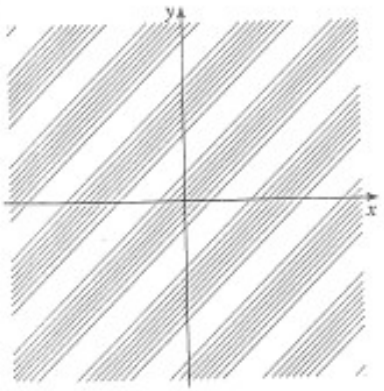

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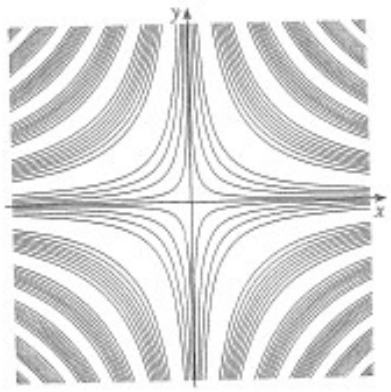

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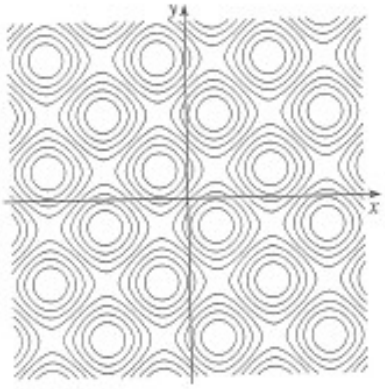

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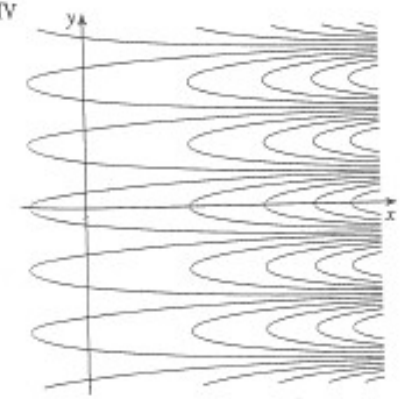

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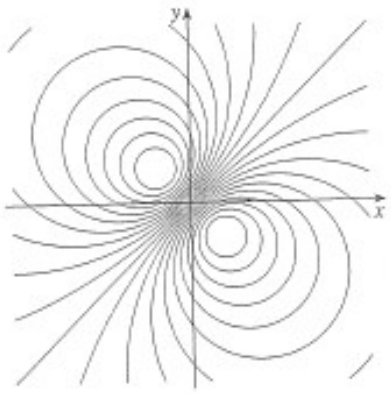
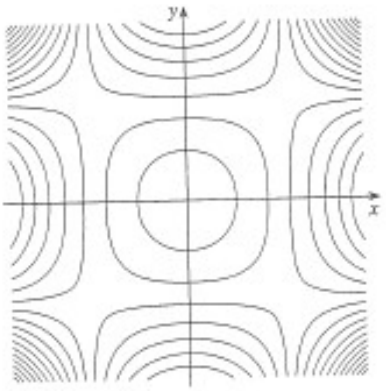
VI