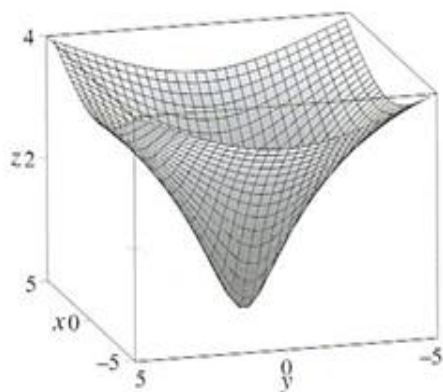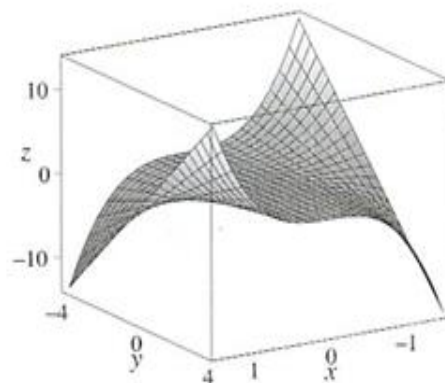## The Matching Game (General Functions)

Match each function with its graph. Give reasons for your choices.
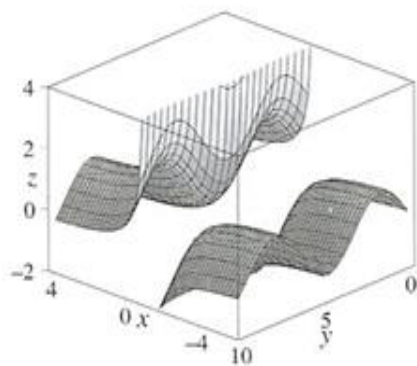
1. $f(x,y) = \dfrac{1}{x+1} + \sin y$
2. $f(x,y) = \sqrt{4 - x^2 - y^2}$
3. $f(x,y) = \cos(x + y^2)$
4. $f(x,y) = \ln(x^2 + y^2 + 1)$
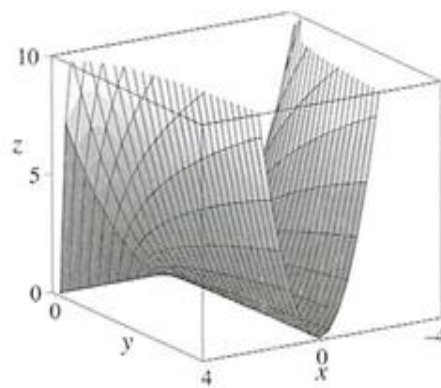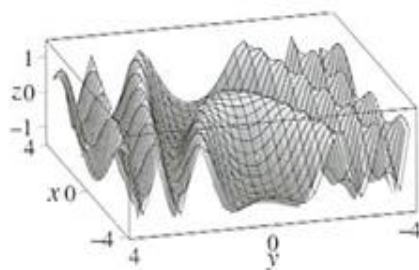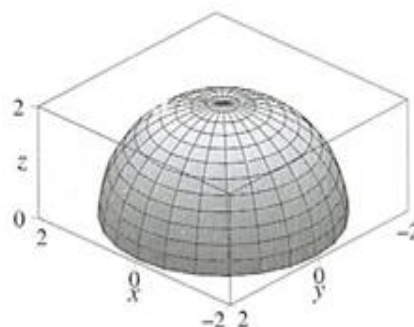5. $f(x,y) = x^2\sqrt{y}$
6. $f(x,y) = x^3 y$

I

II

III

IV

V

VI

Group Work 3, Section 9.6
The Matching Game (Quadric Surfaces)

Match each function with its graph. Give reasons for your choices.
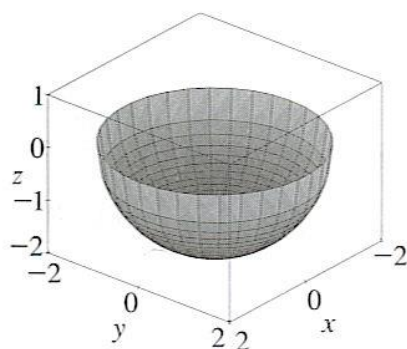
1. $x^2 + y^2 + \frac{1}{4}z^2 = 1$

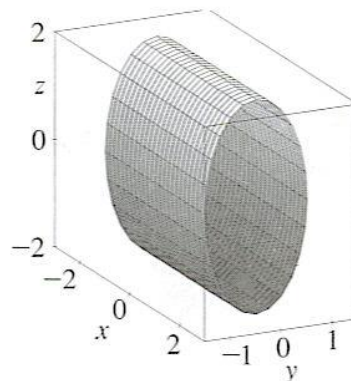2. $z = -\sqrt{4 - x^2 - y^2}$

3. $y^2 + \frac{1}{4}z^2 = 1$

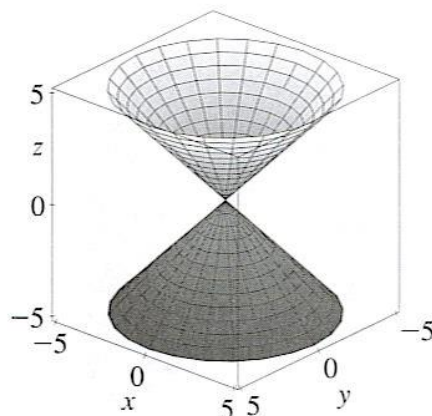4. $\frac{1}{9}z^2 - \frac{1}{4}y^2 = 1$

5. $\frac{1}{4}x^2 - y^2 - z^2 = 1$
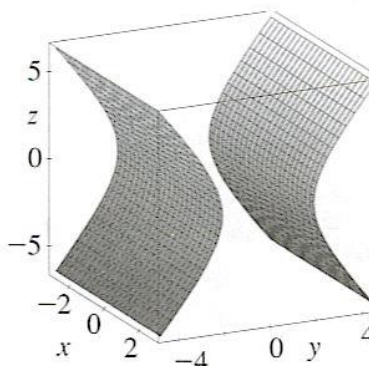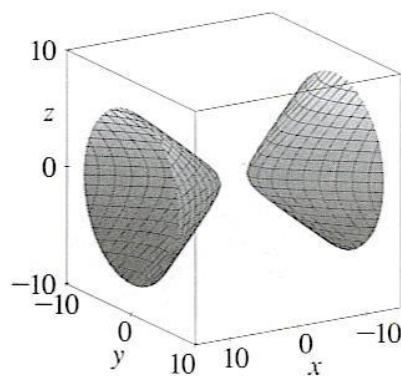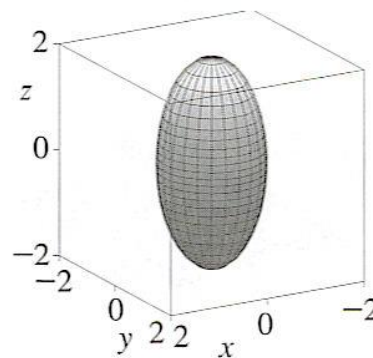
6. $|z| = \sqrt{x^2 + y^2}$

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III

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VI