

# Math 253

## Matching Problems

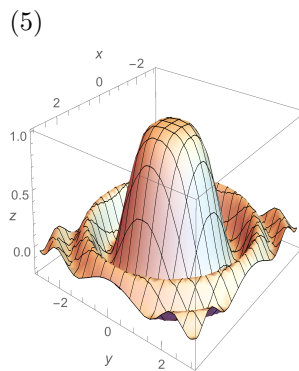
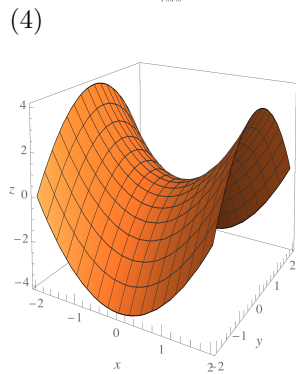
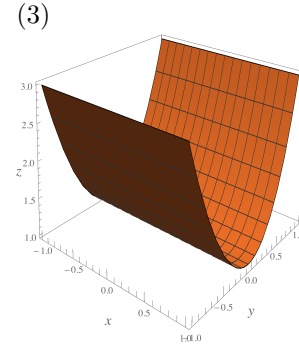
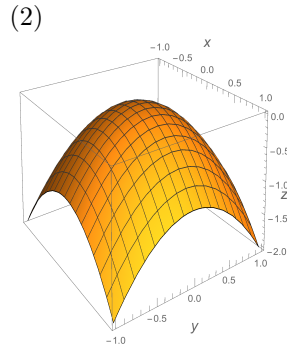
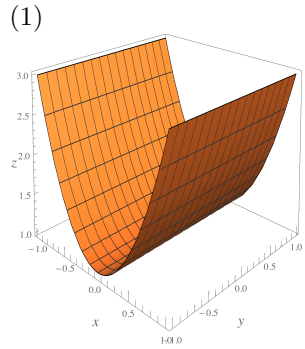
Name: \_\_\_\_\_

Match the correct function with the correct surface graph with the correct level curves.

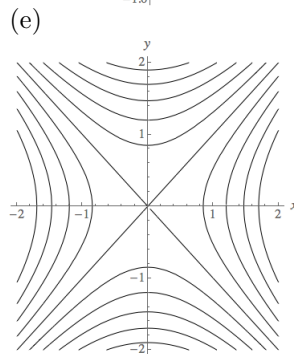
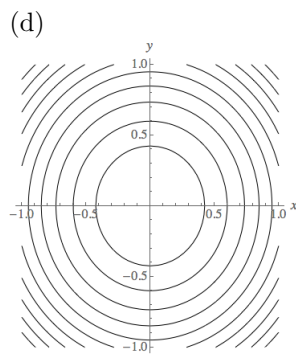
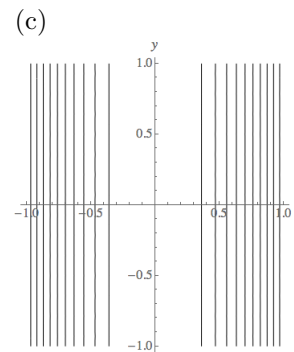
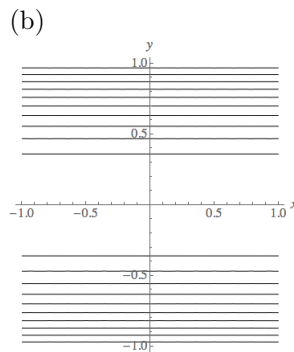
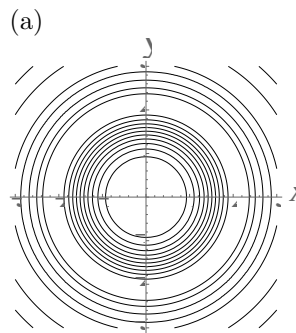
Functions:

- (A)  $z = -x^2 - y^2$       (B)  $z = x^2 - y^2$       (C)  $z = 1 + 2y^2$       (D)  $z = \frac{\sin(x^2 + y^2)}{x^2 + y^2}$       (E)  $z = 1 + 2x^2$

### Surfaces



### Level Curves



(A) → \_\_\_\_\_ → \_\_\_\_\_

(B) → \_\_\_\_\_ → \_\_\_\_\_

(C) → \_\_\_\_\_ → \_\_\_\_\_

(D) → \_\_\_\_\_ → \_\_\_\_\_

(E) → \_\_\_\_\_ → \_\_\_\_\_