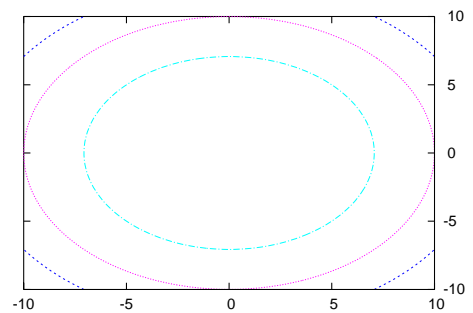
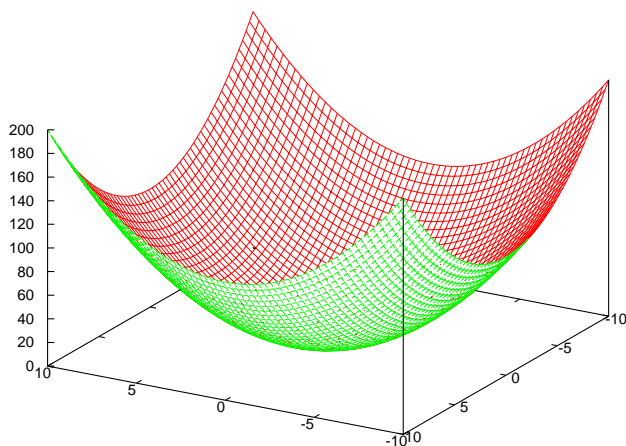


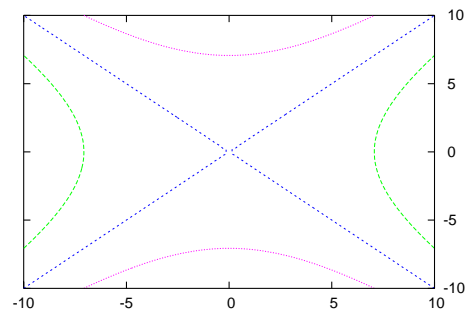
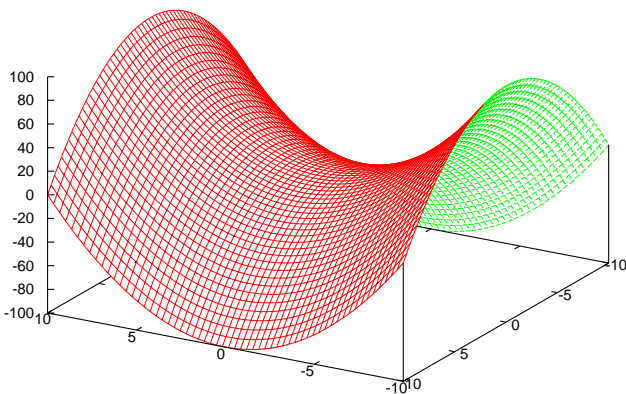
多変数関数の例

(1). $z = x^2 + y^2$

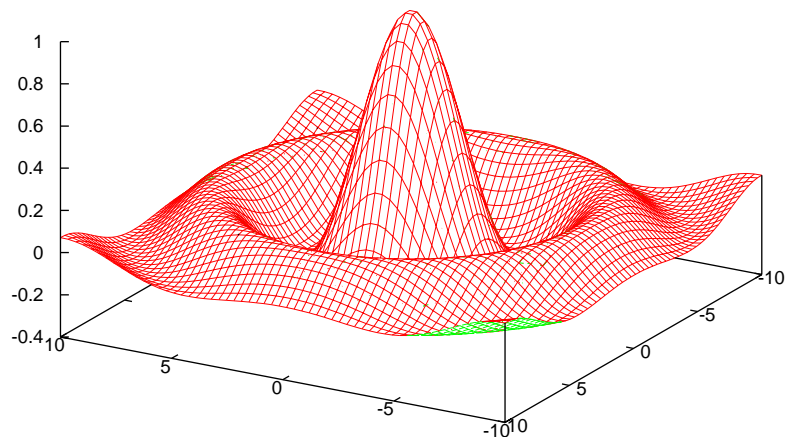
| y \ x | -2 | -1.5 | -1 | -0.5 | 0 | 0.5 | 1 | 1.5 | 2 |
|-------|------|------|------|------|------|------|------|------|------|
| -2 | 8 | 6.25 | 5 | 4.25 | 4 | 4.25 | 5 | 6.25 | 8 |
| -1.5 | 6.25 | 4.5 | 3.25 | 2.5 | 2.25 | 2.5 | 3.25 | 4.5 | 6.25 |
| -1 | 5 | 3.25 | 2 | 1.25 | 1 | 1.25 | 2 | 3.25 | 5 |
| -0.5 | 4.25 | 2.5 | 1.25 | 0.5 | 0.25 | 0.5 | 1.25 | 2.5 | 4.25 |
| 0 | 4 | 2.25 | 1 | 0.25 | 0 | 0.25 | 1 | 2.25 | 4 |
| 0.5 | 4.25 | 2.5 | 1.25 | 0.50 | 0.25 | 0.5 | 1.25 | 2.5 | 4.25 |
| 1 | 5 | 3.25 | 2 | 1.25 | 1 | 1.25 | 2 | 3.25 | 5 |
| 1.5 | 6.25 | 4.5 | 3.25 | 2.5 | 2.25 | 2.5 | 3.25 | 4.5 | 6.25 |
| 2 | 8 | 6.25 | 5 | 4.25 | 4 | 4.25 | 5 | 6.25 | 8 |



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

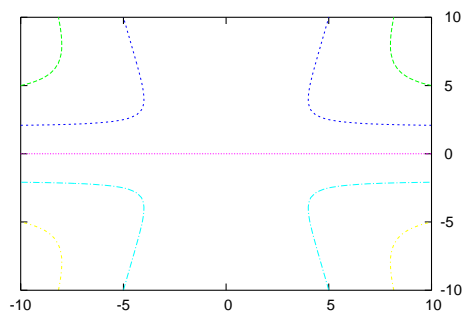
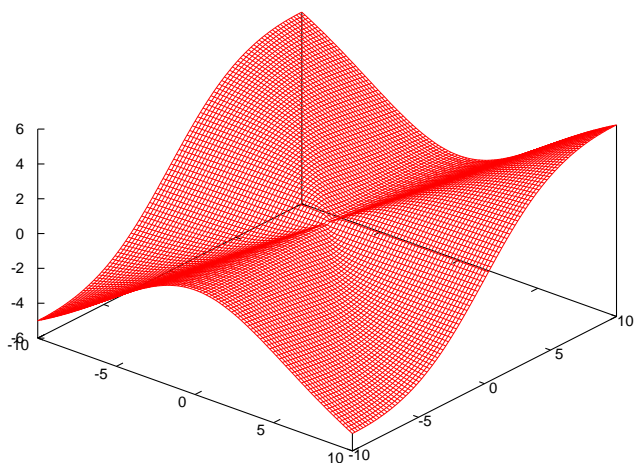


(3). $z = \frac{1}{\sqrt{x^2 + y^2}} \sin(\sqrt{x^2 + y^2})$



連続性

(1). 連続関数 $z = \frac{x^2 y}{x^2 + y^2}$



(2). 原点では不連続な関数 $z = \frac{xy}{x^2 + y^2}$

