$z^2 = 4x^2 + y^2$

1

$z^2 = x^2 - y^2$

2

$x^2 - y^2 + z^2 = 1$

3

$z = x^2 - 4y^2$

4

$x = z^2 - 4y^2$

5

$x = y^2 - 4z^2$

6

$4x^2 = 1 - z^2 - 2y^2$

7

$x^2 = 1 + z^2 - y^2$

8

$x^2 = 1 + z^2 + y^2$

9

$z^2 = x - 4y^2$

10

$z = x^2 + 4y^2$

11

$z = 4x^2 + y^2$

12

Elliptical Cone,
center on z-axis

L

Cone,
center on x-axis

G

Hyperboloid of revolution,
one sheet,
center on y-axis

H

Hyperbolic paraboloid,
center on z-axis,
peaks along x-axis,
valleys along y-axis

C

Hyperbolic paraboloid,
center on x-axis,
peaks along z-axis,
valleys along y-axis

J

Hyperbolic paraboloid,
center on x-axis,
peaks along y-axis,
valleys along z-axis

I

Tri-axial (scalene) ellipsoid

K

Hyperboloid of revolution,
one sheet,
center on z-axis

A

Hyperboloid of revolution,
two sheets,
center on x-axis

E

Elliptic paraboloid,
center on x-axis,
wider in z-direction

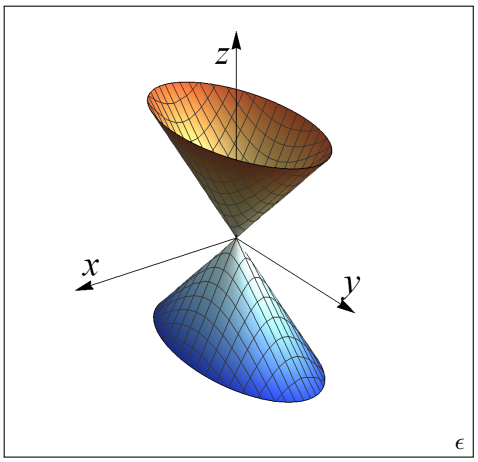
B

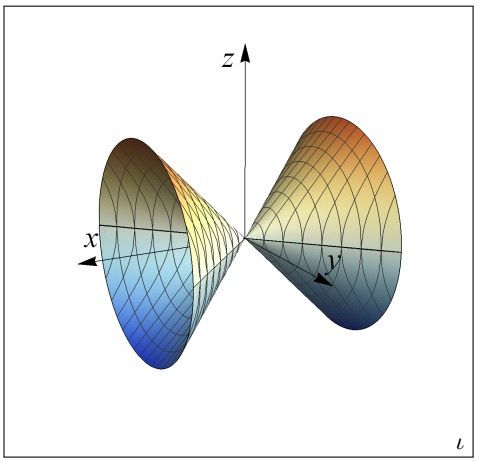
Elliptic paraboloid,
center on the z-axis,
wider in x-direction

D

Elliptic paraboloid,
center on z-axis,
wider in y-direction

F


z
x
y
ϵ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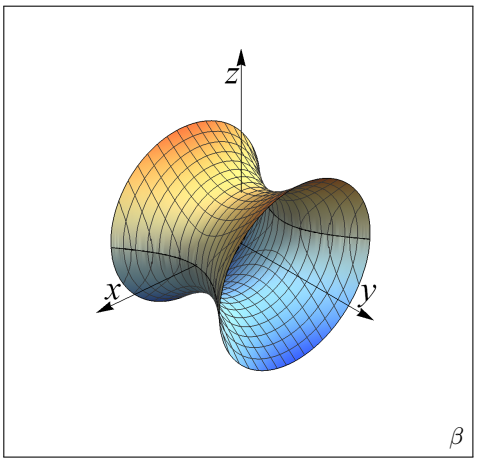
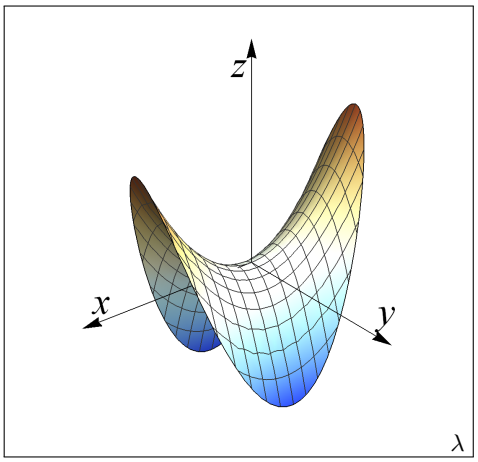
y
ι


z
x
y
β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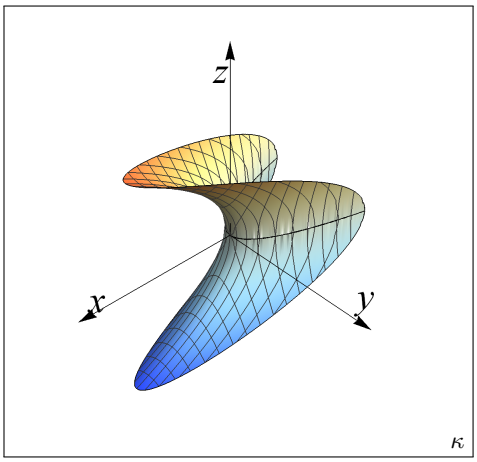
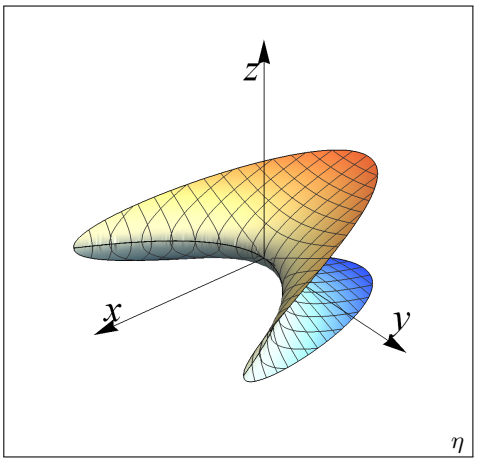
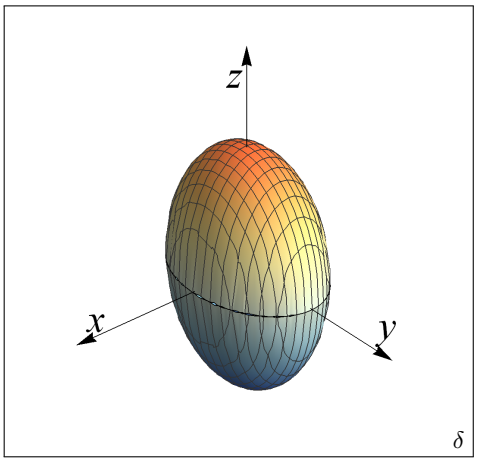
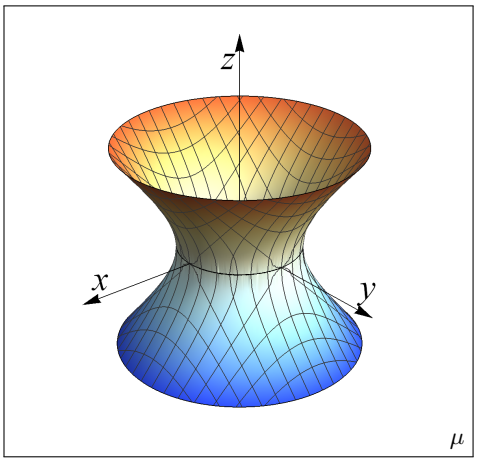
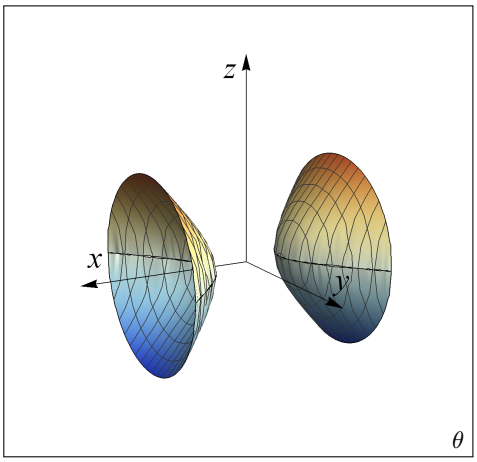
y
λ

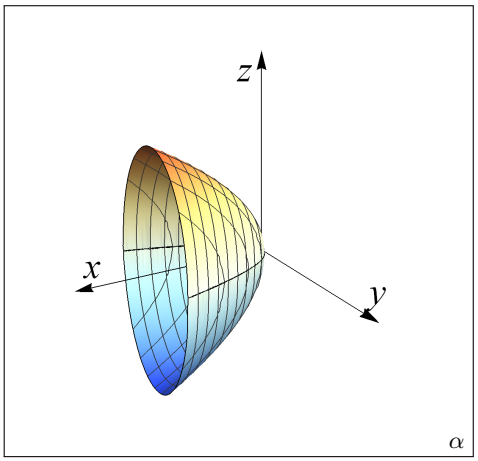

z
x
y
κ


z
x
y
η


z
x
y
δ


z
x
y
μ


z
x
y
θ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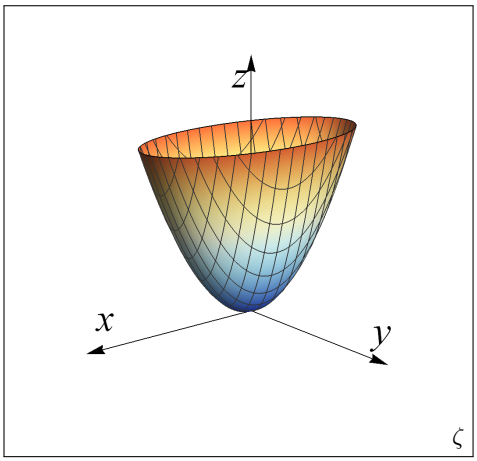
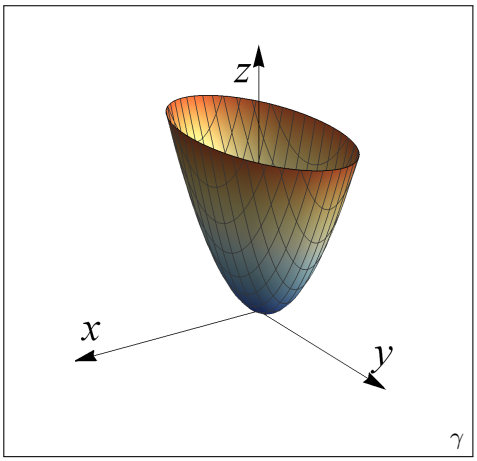
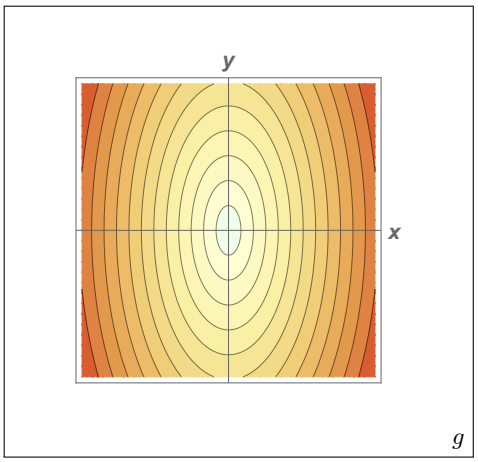
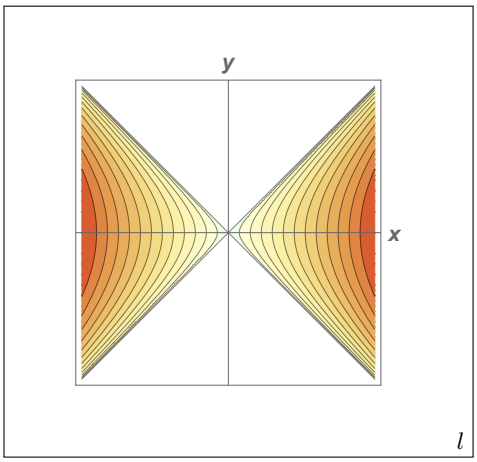
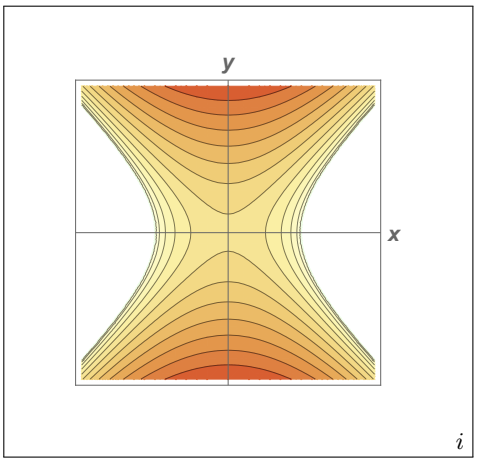
x
y
α

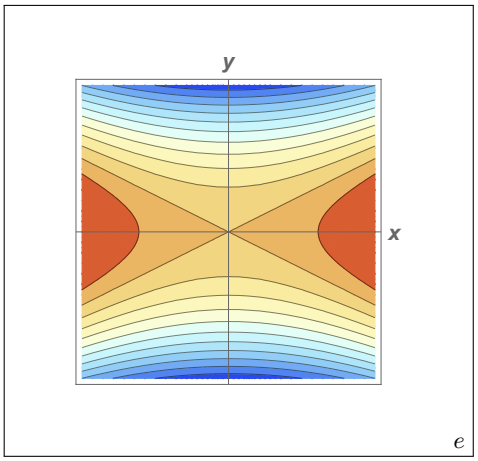

z
x
y
ζ

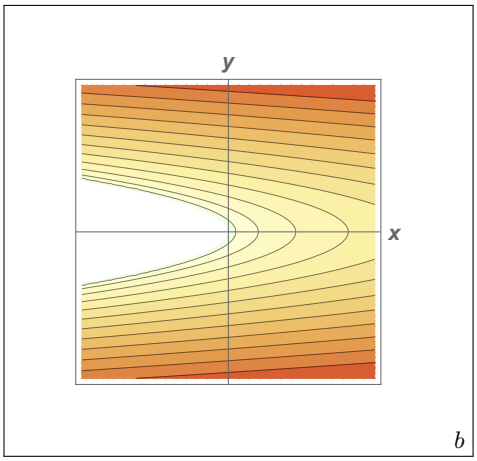

z
x
y
γ

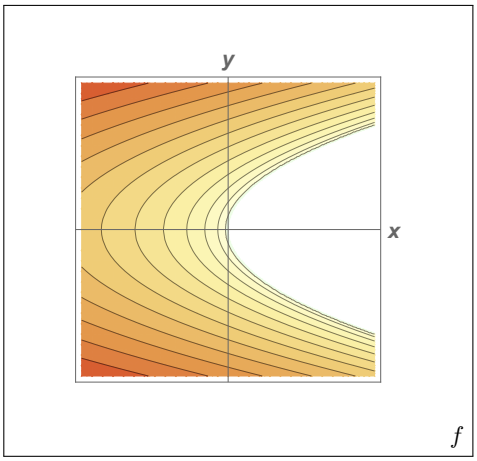

y
x
g

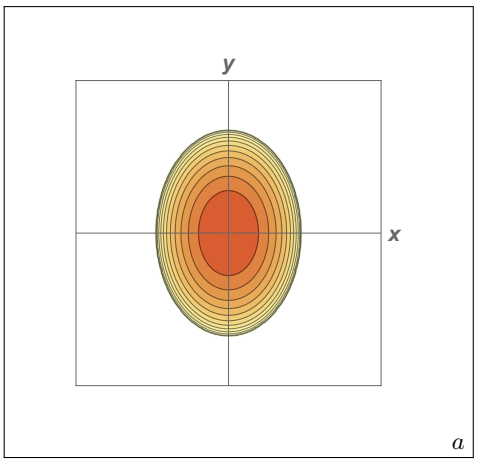

y
x
l


y
x
i


y
x
e


y
x
b


y
x
f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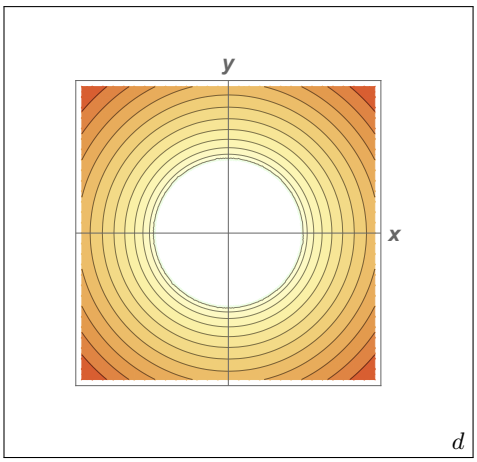
a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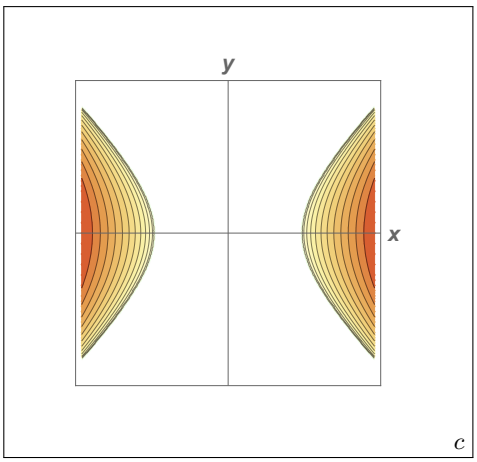
d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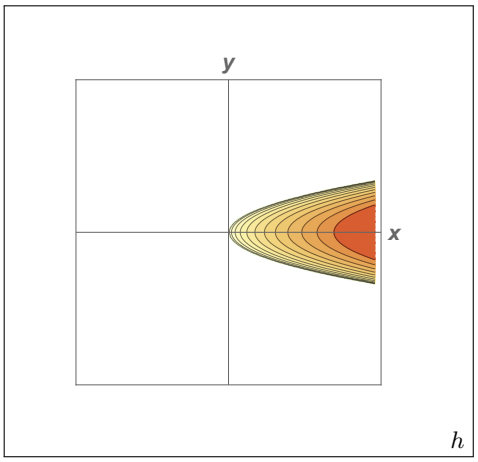
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x
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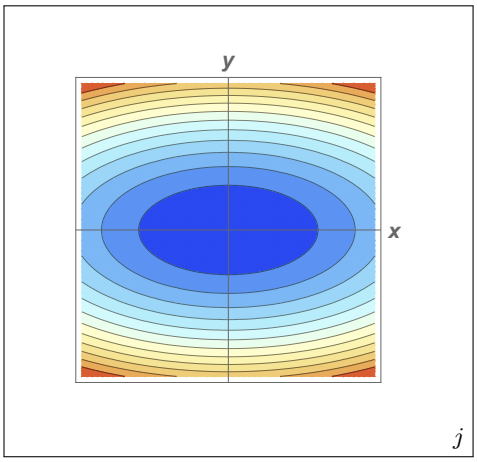
y
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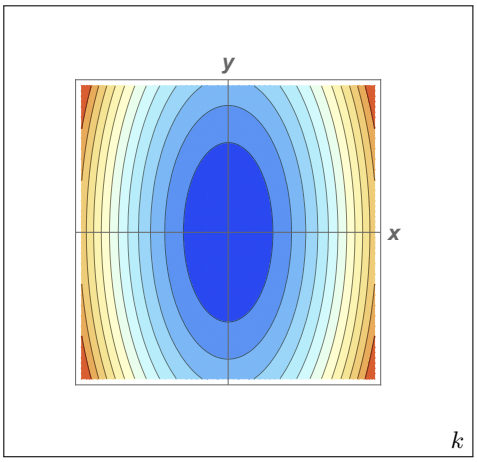
j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x
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