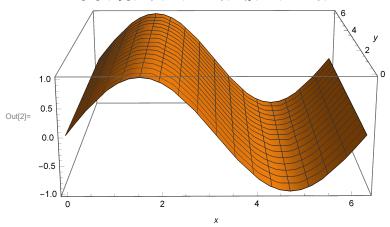
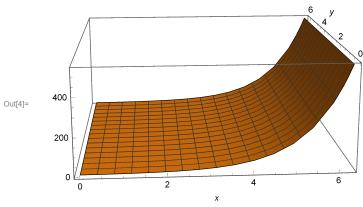
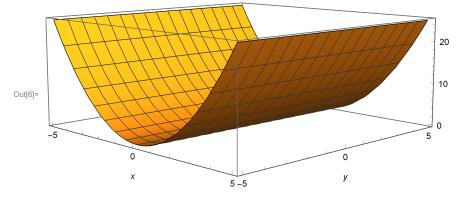
$\begin{array}{lll} & \text{In[1]:=} & f[x_{-},y_{-}] := Sin[x]; & (*\mathbb{R}^2 \to \mathbb{R} *) \\ & & \text{Plot3D[}f[x,y], & \{x,0,2\text{Pi}\}, & \{y,0,2\text{Pi}\}, & \text{AxesLabel} \to \text{Automatic]} \end{array}$



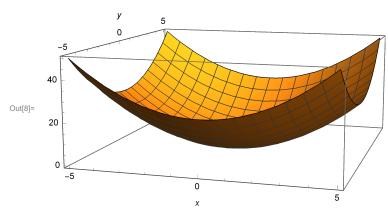
$$\label{eq:local_local_local_local} \begin{split} & \ln[3] := \ f[x_{_}, \, y_{_}] := Exp[x]; \quad (* \ \mathbb{R}^2 \to \mathbb{R} \ *) \\ & \quad \text{Plot3D[} f[x, \, y], \ \{x, \, 0, \, 2\, \text{Pi}\}, \ \{y, \, 0, \, 2\, \text{Pi}\}, \ \text{AxesLabel} \to \text{Automatic]} \end{split}$$



 $\begin{array}{ll} & \text{In}[5]:= \ f[x_{_}, \ y_{_}] := x^2; & (* \ \mathbb{R}^2 \to \mathbb{R} \ *) \\ & \text{Plot3D}[f[x, y], \ \{x, \ -5, 5\}, \ \{y, \ -5, 5\}, \ \text{AxesLabel} \to \text{Automatic}] \end{array}$



 $\begin{array}{ll} \mbox{In[7]:=} & f[x_{\tt},y_{\tt}] := x^2 + y^2; & (* \ \mathbb{R}^2 \rightarrow \mathbb{R}^2 \ *) \\ & \mbox{Plot3D[}f[x,y], \ \{x, \ -5,5\}, \ \{y, \ -5,5\}, \ \mbox{AxesLabel} \rightarrow \mbox{Automatic]} \end{array}$



 $\begin{array}{ll} & \text{In}[9]:= \ f[x_{_}, \, y_{_}] := \sqrt{\left(x^2 + y^2\right)}; & (* \ \mathbb{R}^2 \ \rightarrow \mathbb{R}^2 \ *) \\ & & \text{Plot3D}[f[x, \, y], \ \{x, \, -5, \, 5\}, \ \{y, \, -5, \, 5\}, \ \text{AxesLabel} \rightarrow \text{Automatic}] \end{array}$

