Cálculo Diferencial e Integral 2 Respostas à Ficha de Trabalho 6

1. (a) Máximo: $f(\pm 1, 0) = f(0, \pm 1) = 1$.

$$\text{M\'inimo: } f\left(\pm\frac{\sqrt{2}}{2},\pm\frac{\sqrt{2}}{2}\right)=\frac{3}{4}.$$

- (b) Máximo: $f(\pm 1, 0) = f(0, \pm 1) = 1$. Mínimo: f(0, 0) = 0.
- (c) Máximo: f(1,1,1) = 3. Mínimo: f(-1,-1,-1) = -3.
- (d) Máximo: f(-2,0,3) = 3. Mínimo: f(2,0,-1) = -1.

$$\text{2. M\'{a}ximo: } f\left(-\frac{1}{2},-\frac{1}{2},\pm\sqrt{\frac{3}{2}}\right) = \frac{9}{2}. \text{ M\'{i}nimo: } f\left(\frac{1}{2},\frac{1}{2},0\right) = -\frac{1}{2}.$$

3.
$$\left(0, \pm \frac{\sqrt{2}}{2}, \frac{1}{2}\right)$$
.

4.
$$\left(\frac{11}{8}, \frac{11}{8}\right)$$
.

- 5. Cubo de lado $1~\mathrm{m}$.
- 6. 2*ab*.