

## 11.7 | 연습문제 정답

2025. 3. 10 업데이트

**01.** (a)  $f(-1, 1) = 1$  : 극솟값

(b) 최댓값 :  $7 + 4\sqrt{2}$ , 최솟값 :  $7 - 4\sqrt{2}$

**02.** 최댓값 :  $f\left(\frac{1}{\sqrt{2}}, -\frac{1}{\sqrt{2}}\right) = f\left(-\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right) = 4$

최솟값 :  $f\left(\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right) = f\left(-\frac{1}{\sqrt{2}}, -\frac{1}{\sqrt{2}}\right) = 0$

**03.**  $f(-1, 1, 1) = -3$

**04.**  $d = \frac{\sqrt{725}}{29}$

**05.** 3

**06.**  $\left(1, \frac{1}{\sqrt{2}}\right), \left(-1, -\frac{1}{\sqrt{2}}\right)$

**07.**  $4\sqrt{a^2 + b^2}$

**08.**  $\frac{8\sqrt{3}abc}{9}$

**09.**  $\frac{15\sqrt{15}}{4}$

**10.** 낮은 온도  $-\frac{25}{2}$ , 높은 온도  $\frac{25}{2}$

11.  $d = 2\sqrt{14}$

12.  $(1, -1, 1), (-1, 1, 1), (1, 1, -1)$

13. 생략

14.  $\sqrt{\sum_{i=1}^n a_i^2}$