

Answers to Test 2, 1992

1. (a) $x^3 \cos(xy)$
(b) $\langle 4, 3 \rangle$
(c) 0
(d) $3/2$
(e) $-\sqrt{2}$
2. $6x + y + 3z = 4$
3. $18wy^{5/2} \cos(x + y)$
4. $(0, 1, 0)$ and $(1/2, -1/2, -1/4)$
5. There is a local minimum $(-2, 1, -1)$.
6. Maximum Value: 12 at $(1, \pm\sqrt{3})$
Minimum Value: -15 at $(-2, 0)$