

MAC 2313 EXAM 2 ANSWERS, FALL 2019

VERSION A

1. a
2. d
3. d
4. e
5. c

6. a
7. c
8. b
9. c
10. e

11. c
12. d
13. b
14. a

VERSION B

1. c
2. e
3. a
4. b
5. b

6. e
7. d
8. d
9. a
10. c

11. c
12. e
13. d
14. c

PART II

1. (a) $\left\langle \frac{1}{5}, \frac{2}{5} \right\rangle$
(b) $z = \ln \sqrt{5} + \frac{1}{5}(x - 1) + \frac{2}{5}(y - 2)$
(c) -0.06

2. (a) $(2, 0)$
(b) max: $21; (-2, -\sqrt{5}), (-2, \sqrt{5})$
min: $-5; (2, 0)$

1. (a) $\left\langle \frac{3}{10}, \frac{1}{10} \right\rangle$
(b) $z = \ln \sqrt{10} + \frac{3}{10}(x - 3) + \frac{1}{10}(y - 1)$
(c) 0.04

2. (a) $(-2, 0)$
(b) max: $25; (2, -\sqrt{5}), (2, \sqrt{5})$
min: $-1; (-2, 0)$