

Answers to Practice Test 3

1. B
2. B
3. D
4. D
5. D
6. A
7. C
8. A
9. D
10. E
11. D
12. D
13. C
14. B
15. B

Free Response:

1. $\int_0^{2\pi} \int_0^{\sqrt{3}} \int_2^{8-2r^2} 2zr^2 \sin \theta dz dr d\theta$
2. $\int_0^2 \int_{-\sqrt{x}}^{\sqrt{x}} (x-y) dy dx$
3. $\int_0^{2\pi} \int_0^{\pi/4} \int_0^3 \rho^2 \sin \phi d\rho d\phi d\theta$
4. $\int_0^2 \int_0^2 (2u+4v) du dv$
5. Max: $18\sqrt{5}$; Min: $-18\sqrt{5}$.