

ACCA Calculus Competition 2013 Solutions

1. a
2. d
3. c
4. d
5. e
6. e (typo in problem)
7. b (typo in problem)
8. d
9. a
10. b
11. d
12. d
13. e
14. d
15. c
16. $\frac{1}{12}$
17. $\frac{49}{\sqrt{17}}$
18. $\frac{500\pi}{3\sqrt{3}}$
19. $2x \sec^2 x^2 - \sin(\tan x^2) \cos(\cos(\tan x^2))$
20. $4\frac{1}{6}$
21. $\frac{1}{1+x^2} \cdot \frac{1}{\sqrt{x}}$
22. $4\pi^2$
23. $[-\frac{1}{3}, \frac{1}{3})$ and $\frac{1+2x+3x^2}{1-x^3}$
24. Both have 3,192.53 lbs
25. $\frac{\pi}{4}$