

## 2015 ACCA CALCULUS COMPETITION ANSWER SHEET

COLLEGE/UNIVERSITY NAME: KEY

**TEAM MEMBERS:** Please print and sign your names below. Note that by doing this, you are not only identifying the team members, but you are also verifying that your team has abided by the instructions on the Student Instruction Sheet.

Printed Name	Signature

### MULTIPLE CHOICE

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

### SHORT ANSWER

1. -2	6. $y = -x + \frac{3\pi}{4}$
2. $\sqrt{5}$	7. $\frac{\pi}{2}(e^9 - 1)$
3. (1, 3)	8. -30
4. $\frac{2061}{10}$	9. $f'(0) = -f'(1)$
5. $f(x) = 16x^3 - 96x^2 + 144x - 4$	10. $\frac{\sqrt{2}}{2} + \frac{1}{2} \ln(\sqrt{2} + 1)$