

Calculus Team Solutions 2009

1.  $e^2 - 8$  or  $-0.611$

2.  $-2 + \frac{\sqrt{3}}{3} + \frac{\pi}{6}$  or  $-0.899$

3.  $\frac{3}{2}\ln 2 + 1$  or  $2.040$

4.  $1$

5.  $A = -\frac{4}{7}; B = \sqrt[5]{-48}; C = \sqrt[5]{2}; D = \frac{18}{7}$

6.  $e^2 - 1$  or  $6.389$

7.  $\frac{907}{3} + \frac{143}{170}\pi$  or  $304.976$

8.  $\frac{1}{28}$  or  $0.036$

9.  $\frac{97}{2}$  or  $48.5$

10.  $A = 1; B = 300\text{mph}; C = \frac{\sqrt{2}}{2}; D = \frac{4}{17}$

11.  $64$

12.  $564$

13.  $\frac{5}{2} + e^{3/2}$  or  $6.982$

14.  $\frac{19}{8}$  or  $2.375$