JHMT 2013 Calculus Test
SOLUTIONS

Problem 1. 4

Problem 2. 3

Problem 3. $\frac{8}{27}\left(10\sqrt{10}-1\right)$

Problem 4. 0

Problem 5. e^{2013}

Problem 6. $-\frac{\pi^2}{6}$

Problem 7. $1-\log(2)$

Problem 8. $1/3$

Problem 9. $\pi\frac{2^\pi}{2^\pi-1}$

Problem 10. $\sqrt{\frac{h^2+r^2}{v^2}\log^2 2+\frac{r^2}{v^2}\pi^2}=\sqrt{2504\log^2 2+2500\pi^2}$