

Calculus

1. 3

2. $\frac{2\sqrt{3}}{3}$

3. 501

4. 100 (seconds)

5. $\frac{a}{1-a}$ and $-\frac{a}{a+1}$

6. $16\pi + 32$

7. 199

8. 103

9. $\frac{773}{1250}$

10. $\frac{60}{19}$