

1. $2 + \frac{\pi}{4}$

2. 28π

3. $\frac{144\pi}{5}$

4. $\left\langle \frac{1}{\sqrt{1518}}, \frac{34}{\sqrt{1518}}, \frac{-19}{\sqrt{1518}} \right\rangle$

5. $-\frac{84}{323}$

6. $\frac{1}{2} + \frac{\sqrt{3}}{2}i$

7. 4

8. $\frac{4}{3}$

9. 6

10. $2\sqrt{10}$

11. $\frac{70}{589}$

12. $\frac{21\pi}{2}$

13. $-\frac{21}{4}$

14. 13