

1. 3
2. 308
3. $\left(-1, -\frac{5}{3}\right)$
4. $1728 + 360\pi + 864\pi\sqrt{3}$
5. $9720 + 54\sqrt{3} - 224\pi$
6. $14\pi + \frac{8}{3}$
7. 7708
8. $\frac{617 + 8\sqrt{170}}{8}$
9. $\frac{284\pi + 36\pi\sqrt{17}}{3}$
10. 54
11. 44
12. $146 + 18\sqrt{6}$
13. $\sqrt{285} + \sqrt{249} + 890$
14. $1 + \sqrt{3}$