

MATEMATIKA 1

Rješenja 13. domaće zadaće

1. (a) divergira
(b) $\ln 2$
2. (a) $\frac{2\pi}{3\sqrt{3}}$
(b) $\frac{\pi}{4}$
3. (a) $\frac{1}{2}$
(b) 2
4. (a) 1
(b) π
5. (a) divergira
(b) $\frac{2\pi}{3\sqrt{3}}$
6. (a) $P = \frac{9}{2}$
(b) $P = \frac{4}{5}$
7. $P = \frac{157}{24}$
8. $P = 8$
9. $P = \frac{2}{a}$
10. $P = 2\sqrt{2}$
11. $P = 1$
12. $P = 3 \ln 2 - \frac{3}{2}$
13. $P = 4 \ln(7 + 4\sqrt{3}) - 4\sqrt{3}$
14. $P = 3a^2\pi$
15. $P = \frac{3}{2}a^2\pi$
16. (a) $V = \frac{16\pi}{15}$
(b) $\frac{\pi}{2}$
17. $V = \frac{6\pi^2\sqrt{3}-18\pi-\pi^3}{18}$
18. $s = \frac{\sqrt{5}}{2} + \frac{1}{4} \ln(2 + \sqrt{5})$
19. $s = 6a$
20. $s = \frac{a}{2}(2\pi\sqrt{4\pi^2 + 1} + \ln(2\pi + \sqrt{4\pi^2 + 1}))$