

12.6 | 연습문제 정답

01. $m = \frac{88}{5}$, 무게중심 $\left(\frac{18}{11}, \frac{380}{231}\right)$

02. $m = \frac{27k}{8}$, 무게중심 $\left(\frac{5}{4}, \frac{1}{2}\right)$

03. $(0,0)$

04. $(0,0)$

05. 질량 $m = \frac{5\pi}{3}k$, 무게중심 $\left(0, \frac{21}{20}\right)$

06. 질량 $m = \frac{5}{18}\sqrt{2}k$, 무게중심 $\left(\frac{129}{200}, 0\right)$

07. 질량 $m = \frac{a^4bk}{2}\pi$, 무게중심 $\left(0, 0, \frac{b}{2}\right)$

08. 질량 $m = k$, 무게중심 $\left(\frac{7}{12}, \frac{7}{12}, \frac{7}{12}\right)$

09. 질량 $m = \frac{27k}{8}$, 무게중심 $\left(\frac{2}{7}, \frac{2}{7}, \frac{2}{7}\right)$

10. 질량 $m = \frac{2a^5k\pi}{5}$, 무게중심 $\left(0, 0, \frac{5a}{12}\right)$

11. 질량 $m = \frac{56}{5} \sqrt{3} a^5 \pi$, 무게중심 $(0,0,0)$

12. (a) $\frac{k}{3}$

(b) $\frac{k}{3}$

(c) $\frac{1}{12}k$

13. (a) $\frac{5a^4k}{32}$

(b) $k\left(a^2 + \frac{5a^4}{32}\right)\pi$

(c) $\frac{5a^4k}{32}\pi$

14. (a) $Ik\pi$

(b) $\frac{7}{6}k\pi$

(c) $3k\pi$

15. $\left(\frac{2}{5}a, \frac{2}{5}a\right)$