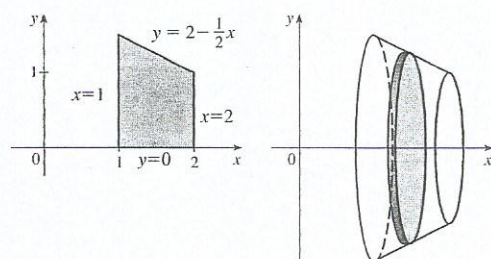
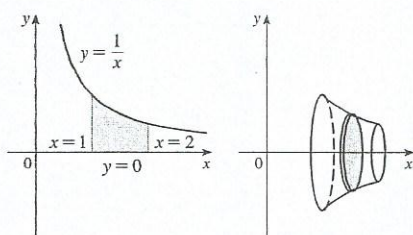
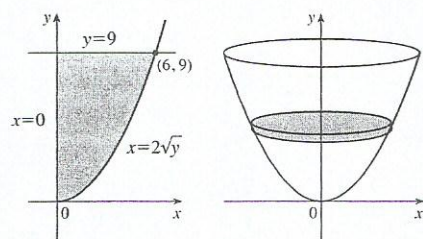
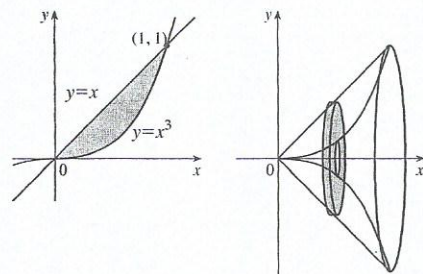
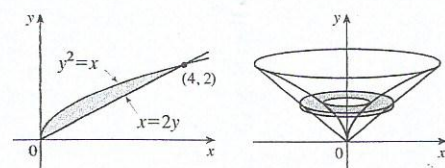
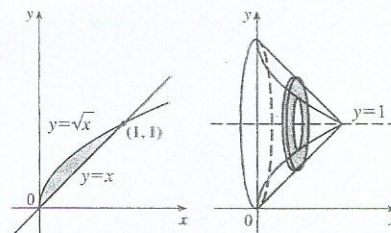
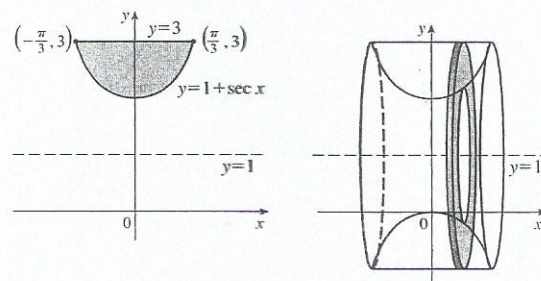
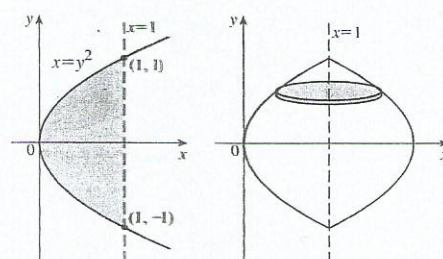
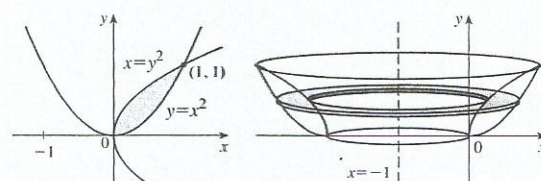


CAPÍTULO 6

EXERCÍCIOS 6.1 ■ PÁGINA 395

1. $\frac{32}{3}$ 3. $e - (1/e) + \frac{10}{3}$ 5. 19,5 7. $\frac{1}{6}$ 9. $\ln 2 - \frac{1}{2}$
 11. $\frac{1}{3}$ 13. 72 15. $2 - 2 \ln 2$ 17. $\frac{59}{12}$ 19. $\frac{32}{3}$
 21. $\frac{8}{3}$ 23. $\frac{1}{2}$ 25. $\pi - \frac{2}{3}$ 27. $\ln 2$ 29. 6,5
 31. $\frac{3}{2}\sqrt{3} - 1$ 33. 0,6407 35. 0,090; 0,04 37. 8,38
 39. $12\sqrt{6} - 9$ 41. 36 m 43. 4 232 cm²
 45. (a) Carro A (b) A distância que A está à frente de B depois de 1 minuto
 (c) Carro A (d) $t \approx 2,2$ min
 47. $\frac{24}{5}\sqrt{3}$ 49. $4^{2/3}$ 51. ± 6
 53. $0 < m < 1; m - \ln m - 1$

EXERCÍCIOS 6.2 ■ PÁGINA 405

 1. $19\pi/12$

 3. $\pi/2$

 5. 162π

 7. $4\pi/21$

 9. $64\pi/15$

 11. $\pi/6$

 13. $2\pi(\frac{4}{3} - \sqrt{3})$

 15. $16\pi/15$

 17. $29\pi/30$

 19. $\pi/7$ 21. $\pi/10$ 23. $\pi/2$ 25. $7\pi/15$

 27. $5\pi/14$ 29. $13\pi/30$ 31. $\pi \int_0^{\pi/4} (1 - \tan^3 x)^2 dx$

 33. $\pi \int_0^{\pi} [1^2 - (1 - \sin x)^2] dx$

 35. $\pi \int_{-2\sqrt{2}}^{2\sqrt{2}} [5^2 - (\sqrt{1 + y^2} + 2)^2] dy$

 37. -1,288, 0,884; 23,780 39. $\frac{11}{8}\pi^2$

 41. Sólido obtido pela rotação da região $0 \leq y \leq \cos x$, $0 \leq x \leq \pi/2$ em torno do eixo x

 43. Sólido obtido pela rotação da região acima do eixo x limitada por $x = y^2$ e $x = y^4$ em torno do eixo y

 45. 1 110 cm³ 47. (a) 196 (b) 838 49. $\frac{1}{3}\pi r^2 h$

 51. $\pi h^2(r - \frac{1}{3}h)$ 53. $\frac{2}{3}b^2 h$ 55. 10 cm³ 57. 24

 59. $\frac{1}{3}$

 61. $\frac{8}{15}$

 63. (a) $8\pi R \int_0^r \sqrt{r^2 - y^2} dy$ (b) $2\pi^2 r^2 R$

 65. $\pi r^2 h$ 67. $\frac{5}{12}\pi r^3$ 69. $8 \int_0^r \sqrt{R^2 - y^2} \sqrt{r^2 - y^2} dy$