

- 184.** 1. $10 + 3(5\sqrt{5} - 2\sqrt{2} - 3\sqrt{10})$. 2. $37\sqrt{2} - 17$.
 4. $a + b + c + d + 2(\sqrt{ab} + \sqrt{ac} + \sqrt{ad} + \sqrt{bc} + \sqrt{bd} + \sqrt{cd})$.
 8. $a^2 - 4a + 6 - \frac{4}{a} + \frac{1}{a^2}$. 9. $a^2 - b^2(x + y)$. 11. 1.
 12. 1. 13. $\sqrt{2}(\sqrt{2} + 1)$. 17. $(x - y)^{\frac{1}{2}}[(x - y)^{\frac{1}{2}} - 1]$.
 19. $\frac{1}{\sqrt{a + b}}$. 20. $\frac{ax + b}{ax - b}$. 21. $\frac{(a - x)^{\frac{1}{2}} + 1}{(a + x)^{\frac{1}{2}} - 1}$.
- 185.** 1. $\frac{(a^2 - 36)^{\frac{1}{2}}}{a - 6}$. 2. $\frac{\sqrt{xy}}{y}$. 3. $\frac{\sqrt{1 - x^2}}{1 - x}$. 4. $\frac{7\sqrt{15}}{45}$.
 5. $\frac{2\sqrt{3}}{3}$. 6. $5\sqrt{3}$. 7. $\frac{(a + \sqrt{b})^2}{a^2 - b}$. 8. $\frac{(a - \sqrt{x})^2}{a^2 - x}$.
 9. $\frac{(\sqrt{x} + \sqrt{y})^2}{x - y}$. 10. $\frac{a^2 + a(x + y)^{\frac{1}{2}} - 2(x + y)}{a - x - y}$.
 11. $\frac{9\sqrt{15} + 41}{2}$. 12. $\frac{(\sqrt{x} - \sqrt{x + y})^2}{-y}$.
 13. $\frac{x + (x^2 - a^2)^{\frac{1}{2}}}{a^2}$. 14. $(a + 1)^{\frac{1}{2}} - a^{\frac{1}{2}}$.
 15. $\frac{x + \sqrt{x^2 - a^2}}{a}$.
- 187.** 1. $x^2 + 2xy = (x - y)^2 - y^2$.
 2. $x^2 + 4xy = (x + 2y)^2 - 4y^2$.
 3. $x^2 + 6ax = (x + 3a)^2 - 9a^2$.
 4. $4x^2 + 4xy = (2x + y)^2 - y^2$.
- 190.** 1. $\frac{p^2}{q^2}$. 2. $\frac{(a + b)^3}{c^3}$. 3. $(a + b)^3$. 4. 6. 5. $\sqrt{ab}$.
 6. $a^{\frac{1}{4}}b^{\frac{1}{4}}$. 7. $(a^2 - b^2)^{\frac{nq}{mq + np}}$. 9. $(b^4 - 2a^2b^2 + 2a^4)^{\frac{1}{2}}$.
 10. $b^2 + a$. 11. $\frac{a}{(1 - m^2)^{\frac{1}{2}}}$. 12. $\frac{b}{(1 - n^2)^2}$.
- 191.** 1. 6, 12, 4. 2. 15, 12. 3. 47, 35. 4. 16. 5. $a + 1$.
 6. 8, 16. 7. 64, 512. 8. 16, 48.
 9. 10, 15. 10. $\frac{m^2 + mn}{(m - n)^2}, \frac{mn + n^2}{(m - n)^2}$. 11. 28, 36.