

## 5.4 Lösungen

$$1. \quad r = \frac{P \cdot 75 \cdot 30}{F \cdot \tau \cdot n}$$

$$2. \quad t = \frac{s}{v}$$

$$3. \quad m = \rho \cdot V$$

$$4. \quad z_1 = \frac{z_2 \cdot n_2}{n_1}$$

$$5. \quad r = \sqrt{R^2 - \frac{A}{\pi}}$$

$$6. \quad v = \sqrt{\frac{2W}{m}}$$

$$7. \quad D = \sqrt{\frac{4 \cdot V}{\pi \cdot h} + d^2}$$

$$8. \quad m_2 = \frac{F \cdot r^2}{f \cdot m_1}$$

$$9. \quad r = \sqrt[3]{\frac{3 \cdot V}{4 \cdot \pi}}$$

$$10. \quad R_4 = \frac{R_2 \cdot R_3}{R_1}$$

$$11. \quad c = 2 \cdot s - a - b$$

$$12. \quad h = \frac{2 \cdot A}{c}$$

$$13. \quad R_2 = \frac{R_1}{V - 1}$$

$$14. \quad a = 2 \cdot \sqrt{k^2 - h^2}$$

$$15. \quad F_w = \frac{F_L \cdot (\rho - \rho_w)}{\rho}$$

$$16. \quad \rho = \frac{2 \cdot \Delta p}{v^2}$$

$$17. \quad \Delta \vartheta = \frac{R_w - R_k}{R_k \cdot \alpha}$$

$$18. \quad h = \frac{2 \cdot A}{a + b}$$

$$19. \quad R_2 = \frac{R_{\text{ges}} \cdot R_1}{R_1 - R_{\text{ges}}}$$

$$20. \quad u = (r - s)^2$$

$$21. \quad R = \frac{\eta R_i}{1 - \eta}$$

$$22. \quad r_1 = \frac{C \cdot r_2}{4 \cdot \pi \cdot k \cdot r_2 + C}$$

$$23. \quad \alpha = \frac{(U - 2r) \cdot 180}{r \cdot \pi}$$

$$24. \quad C = \frac{1}{(2 \cdot \pi \cdot f)^2 \cdot L}$$

$$25. \quad v_0 = \frac{(s - s_0) \cdot 2}{t} - v = \frac{(s - s_0) \cdot 2 - vt}{t}$$

$$26. \quad C_2 = \frac{C_{\text{ges}} \cdot C_1}{C_1 - C_{\text{ges}}}$$

$$27. \quad g = \frac{V}{R \cdot (1 - V)}$$

$$28. \quad d = D - \frac{2 \cdot A}{l} = \frac{D \cdot l - 2 \cdot A}{l}$$