Vyjadřování neznámé ze vzorce

Vyjádřete z daného vzorce danou neznámou:

1. $s = \frac{1}{2}at^2$; a;
2. $s = \frac{1}{2}at^2$; t;
3. $F_t = f \cdot F_n$; f;
4. $F_v = \frac{\xi}{r} \cdot F_n$; ξ ;
5. $F_v = \frac{\xi}{r} \cdot F_n$; r;
6. $F_d = m\frac{v^2}{r}$; m;
7. $F_d = m\frac{v^2}{r}$; v;
8. $F_d = m\frac{v^2}{r}$; r;
9. $F = m \cdot g \cdot \sin\alpha + f \cdot m \cdot g \cdot \cos\alpha$; m;
10. $F = m \cdot g \cdot \sin\alpha + f \cdot m \cdot g \cdot \cos\alpha$; f;
11. $E_k = \frac{1}{2}m \cdot v^2$; v;
12. $m \cdot g \cdot h = \frac{1}{2}m \cdot v^2 + F \cdot s$; s;
13. $m \cdot g \cdot h = \frac{1}{2}m \cdot v^2 + F \cdot s$; v;
14. $F_g = \kappa\frac{m_1 \cdot m_2}{r^2}$; r;
15. $F_g = \kappa\frac{m_1 \cdot m_2}{(R+h)^2}$; h;
16. $v_k = \sqrt{\kappa\frac{m}{R+h}}$; h;
17. $d = \frac{v_0^2 \cdot \sin(2\alpha)}{g}$; v_0 ;
18. $d = \frac{v_0^2 \cdot \sin(2\alpha)}{g}$; α ;
19. $h = \frac{v_0^2 \cdot \sin^2\alpha}{2g}$; v_0 ;
20. $\left(\frac{a_1}{a_2}\right)^3 = \left(\frac{T_1}{T_2}\right)^2$; a_1 ;
21. $\left(\frac{a_1}{a_2}\right)^3 = \left(\frac{T_1}{T_2}\right)^2$; T_1 ;
22. $\left(\frac{a_1}{a_2}\right)^3 = \left(\frac{T_1}{T_2}\right)^2$; T_2 ;
23. $E_k = \frac{1}{2}m \cdot v^2 + \frac{1}{2}J \cdot \omega^2$; v;
24. $E_k = \frac{1}{2}m \cdot v^2 + \frac{1}{2}J \cdot \omega^2$; J;
25. $p = \frac{F}{\pi\left(\frac{d}{2}\right)^2}$; d;
26. $S \cdot h \cdot \rho_L \cdot g + m \cdot g = S \cdot x \cdot \rho_V \cdot g$; x;
27. $S \cdot h \cdot \rho_L \cdot g + m \cdot g = S \cdot x \cdot \rho_V \cdot g$; ρ_L ;
28. $\frac{1}{2} \cdot \rho \cdot v_1^2 + \Delta p = \frac{1}{2} \cdot \rho \cdot v_2^2 + h \cdot \rho \cdot g$; Δp ;
29. $\frac{1}{2} \cdot \rho \cdot v_1^2 + \Delta p = \frac{1}{2} \cdot \rho \cdot v_2^2 + h \cdot \rho \cdot g$; v_2 ;
30. $\frac{1}{2} \cdot \rho \cdot v_1^2 + \Delta p = \frac{1}{2} \cdot \rho \cdot v_2^2 + h \cdot \rho \cdot g$; h;
31. $m \cdot g = \frac{1}{2} \cdot C \cdot S \cdot \rho \cdot v^2$; v;
32. $F_e = \frac{k}{4\pi\varepsilon_0\varepsilon_r} \cdot \frac{Q_1 \cdot Q_2}{r^2}$; r;
33. $C = \varepsilon_0\varepsilon_r \cdot \frac{S}{d}$; d;
34. $C = \varepsilon_0\varepsilon_r \cdot \frac{S}{d}$; S;
35. $\frac{1}{C} = \frac{1}{C_1} + \frac{1}{C_2}$; C_1 ;
36. $E = \frac{1}{2} \cdot \frac{Q^2}{C}$; C;
37. $E = \frac{1}{2} \cdot \frac{Q^2}{C}$; Q;
38. $Q = R \cdot I^2 - \mu \cdot I \cdot \frac{\Delta T}{\Delta l}$; R;
39. $Q = R \cdot I^2 - \mu \cdot I \cdot \frac{\Delta T}{\Delta l}$; μ ;
40. $Q = R \cdot I^2 - \mu \cdot I \cdot \frac{\Delta T}{\Delta l}$; Δl ;
41. $R = \rho\frac{l}{S}$; S;
42. $R = \rho\frac{l}{S}$; l;
43. $R = R_0(1 + \alpha \cdot \Delta T)$; R_0 ;
44. $R = R_0(1 + \alpha \cdot \Delta T)$; α ;
45. $R = R_0(1 + \alpha \cdot \Delta T)$; ΔT ;
46. $R_1 = \frac{R_A \cdot R_C}{R_A + R_B + R_C}$; R_A ;
47. $R_1 = \frac{R_A \cdot R_C}{R_A + R_B + R_C}$; R_B ;
48. $R_A = R_1 + R_2 + \frac{R_1 \cdot R_2}{R_3}$; R_1 ;
49. $R_A = R_1 + R_2 + \frac{R_1 \cdot R_2}{R_3}$; R_3 ;

50. $U_e = (R + R_i) \cdot I$; R_i ;

51. $R_p = R_V \cdot \left(\frac{U}{U_V} - 1 \right)$; R_V ;

52. $R_p = R_V \cdot \left(\frac{U}{U_V} - 1 \right)$; U_V ;

53. $R_p = R_V \cdot \left(\frac{U}{U_V} - 1 \right)$; U;

54. $R_B = R_A \cdot \frac{I_A}{I - I_A}$; R_A ;

55. $R_B = R_A \cdot \frac{I_A}{I - I_A}$; I;

56. $R_B = R_A \cdot \frac{I_A}{I - I_A}$; I_A ;

57. $m = \frac{M_m}{F \cdot \nu} \cdot Q$; Q;

58. $m = \frac{M_m}{F \cdot \nu} \cdot Q$; ν ;

59. $F_m = B \cdot I \cdot l \cdot \sin \alpha$; I;

60. $B = \mu_0 \mu_r \frac{I}{2\pi d}$; I;

61. $B = \mu_0 \mu_r \frac{I}{2\pi d}$; d;

62. $F_m = \frac{\mu_0 \mu_r}{2\pi} \cdot \frac{I_1 \cdot I_2}{d} l$; l;

63. $F_m = \frac{\mu_0 \mu_r}{2\pi} \cdot \frac{I_1 \cdot I_2}{d} l$; d;

64. $B = \mu_0 \mu_r \frac{N \cdot I}{l}$; I;

65. $B = \mu_0 \mu_r \frac{N \cdot I}{l}$; l;

66. $B \cdot Q \cdot v = m \cdot \frac{v^2}{r}$; v;

67. $B \cdot Q \cdot v = m \cdot \frac{v^2}{r}$; r;

68. $U_i = -\frac{\Delta B \cdot S \cdot \cos \omega t}{\Delta t}$; ΔB ;

69. $L = \mu_0 \mu_r \frac{N^2 \cdot V}{l^2}$; N;

70. $L = \mu_0 \mu_r \frac{N^2 \cdot V}{l^2}$; l;

71. $I = \frac{U_e - L \cdot \frac{\Delta I}{\Delta t}}{R}$; R;

72. $I = \frac{U_e - L \cdot \frac{\Delta I}{\Delta t}}{R}$; L;

73. $I = \frac{U_e - L \cdot \frac{\Delta I}{\Delta t}}{R}$; Δt ;

74. $X_C = \frac{1}{\omega \cdot C}$; C;

75. $2\pi \cdot f \cdot L = \frac{1}{2\pi \cdot f \cdot C}$; L;

76. $2\pi \cdot f \cdot L = \frac{1}{2\pi \cdot f \cdot C}$; f;

77. $Z = \sqrt{R^2 + \left(\omega \cdot L - \frac{1}{\omega \cdot C} \right)^2}$; R;

78. $Z = \sqrt{R^2 + \left(\omega \cdot L - \frac{1}{\omega \cdot C} \right)^2}$; L;

79. $Z = \sqrt{R^2 + \left(\omega \cdot L - \frac{1}{\omega \cdot C} \right)^2}$; C;

80. $Y = \sqrt{\frac{1}{R^2} + \left(\omega \cdot C - \frac{1}{\omega \cdot L} \right)^2}$; R;

81. $Y = \sqrt{\frac{1}{R^2} + \left(\omega \cdot C - \frac{1}{\omega \cdot L} \right)^2}$; L;

82. $Y = \sqrt{\frac{1}{R^2} + \left(\omega \cdot C - \frac{1}{\omega \cdot L} \right)^2}$; C;

83. $\eta = \frac{P}{U \cdot I \cdot \cos \varphi}$; P;

84. $\eta = \frac{P}{U \cdot I \cdot \cos \varphi}$; U;

85. $s = \frac{f_p - f_r}{f_p}$; f_p ;

86. $s = \frac{f_p - f_r}{f_p}$; f_r ;

87. $\frac{U_2}{U_1} = \frac{N_2}{N_1}$; U_2 ;

88. $\frac{U_2}{U_1} = \frac{N_2}{N_1}$; U_1 ;

89. $T = 2\pi \sqrt{\frac{m}{k}}$; k;

90. $T = 2\pi \sqrt{\frac{m}{k}}$; m;

91. $\omega = \sqrt{\frac{m \cdot g \cdot l}{J + m \cdot l^2}}$; J;

92. $\omega = \sqrt{\frac{m \cdot g \cdot l}{J + m \cdot l^2}}$; m;

93. $f = \frac{1}{2\pi} \cdot \sqrt{\frac{\pi \cdot G \cdot R^4}{2 \cdot l \cdot J}}$; R;

94. $f = \frac{1}{2\pi} \cdot \sqrt{\frac{\pi \cdot G \cdot R^4}{2 \cdot l \cdot J}}$; J;

95. $f_p = \frac{v_z + v_p}{v_z - v} \cdot f$; v;

96. $f_p = \frac{v_z + v_p}{v_z - v} \cdot f$; v_z ;

97. $L = 10 \cdot \log \frac{I}{I_0}$; I;

98. $\sin\alpha = \dfrac{x}{\sqrt{a^2 + x^2}}$; x;

99. $\sin\alpha = \dfrac{x}{\sqrt{a^2 + x^2}}$; a;

100. $2 \cdot n \cdot d + \dfrac{\lambda}{2} = (2k-1) \cdot \dfrac{\lambda}{2}$; λ;

101. $\dfrac{1}{a} + \dfrac{1}{a'} = \dfrac{1}{f}$; f;

102. $\dfrac{1}{a} + \dfrac{1}{a'} = \dfrac{1}{f}$; a;

103. $\dfrac{1}{a} + \dfrac{1}{a'} = \varphi$; a;

104. $\dfrac{1}{f} = \left(\dfrac{n_2}{n_1} - 1\right) \cdot \left(\dfrac{1}{r_1} + \dfrac{1}{r_2}\right)$; f;

105. $\dfrac{1}{f} = \left(\dfrac{n_2}{n_1} - 1\right) \cdot \left(\dfrac{1}{r_1} + \dfrac{1}{r_2}\right)$; n_2;

106. $\dfrac{1}{f} = \left(\dfrac{n_2}{n_1} - 1\right) \cdot \left(\dfrac{1}{r_1} + \dfrac{1}{r_2}\right)$; r_1;

107. $f = \dfrac{f_1 \cdot f_2}{f_1 + f_2 - d}$; d;

108. $f = \dfrac{f_1 \cdot f_2}{f_1 + f_2 - d}$; f_1;

109. $E = \dfrac{I \cdot \cos\alpha}{r^2}$; I;

110. $E = \dfrac{I \cdot \cos\alpha}{r^2}$; r;

111. $E = \dfrac{I \cdot \cos\alpha}{r^2}$; α;

112. $m_{\text{led}} \cdot c_{\text{led}} \cdot (t_{\text{tání}} - t_{\text{led}}) + m_{\text{led}} \cdot l_{\text{t}} + m_{\text{led}} \cdot c_{\text{voda}} \cdot (t - t_{\text{tání}}) = m_{\text{voda}} \cdot c_{\text{voda}} \cdot (t_{\text{voda}} - t)$; t;

113. $p \cdot V = \dfrac{m}{M_{\text{m}}} \cdot R \cdot T$; m;

114. $p \cdot V = \dfrac{m}{M_{\text{m}}} \cdot R \cdot T$; M_{m};

115. $\eta = 1 - \dfrac{T_2}{T_1}$; T_2;

116. $\eta = 1 - \dfrac{T_2}{T_1}$; T_1;

117. $\dfrac{F}{S} = E \cdot \dfrac{l - l_0}{l}$; E;

118. $\dfrac{F}{S} = E \cdot \dfrac{l - l_0}{l}$; l;

119. $\dfrac{F}{S} = E \cdot \dfrac{l - l_0}{l}$; l_0;

120. $\Delta V = V \cdot (1 + \beta \cdot \Delta T) - V$; V;

121. $\Delta V = V \cdot (1 + \beta \cdot \Delta T) - V$; β;

122. $t = \dfrac{l}{c + v} + \dfrac{l}{c - v}$; l;

123. $t = \dfrac{l}{c + v} + \dfrac{l}{c - v}$; v;

124. $t = \dfrac{\tau}{\sqrt{1 - \left(\dfrac{v}{c}\right)^2}}$; τ;

125. $t = \dfrac{\tau}{\sqrt{1 - \left(\dfrac{v}{c}\right)^2}}$; v;

126. $u = \dfrac{u' + v}{1 + \dfrac{u' \cdot v}{c^2}}$; v;

127. $E_{\text{k}} = \dfrac{m_0 \cdot c^2}{\sqrt{1 - \left(\dfrac{v}{c}\right)^2}} - m_0 \cdot c^2$; m_0;

128. $E_{\text{k}} = \dfrac{m_0 \cdot c^2}{\sqrt{1 - \left(\dfrac{v}{c}\right)^2}} - m_0 \cdot c^2$; v;

129. $E^2 = p^2 \cdot c^2 + m_0^2 \cdot c^4$; p;

130. $l = l_0 \cdot \sqrt{\dfrac{1 - \dfrac{v}{c}}{1 + \dfrac{v}{c}}}$; v;

131. $h \cdot f = W + \dfrac{1}{2} \cdot m \cdot v^2$; v;

132. $h \cdot \dfrac{c}{\lambda} = W + \dfrac{1}{2} \cdot m \cdot v^2$; λ;

133. $M_{\text{J}} = \dfrac{4\pi}{3} \sqrt{\dfrac{1}{\rho} \cdot \left(\dfrac{3\pi \cdot k \cdot T}{32\kappa \cdot m_{\text{p}}}\right)^3}$; T;

134. $M_{\text{J}} = \dfrac{4\pi}{3} \sqrt{\dfrac{1}{\rho} \cdot \left(\dfrac{3\pi \cdot k \cdot T}{32\kappa \cdot m_{\text{p}}}\right)^3}$; ρ;

135. $M_{\text{J}} = \dfrac{4\pi}{3} \sqrt{\dfrac{1}{\rho} \cdot \left(\dfrac{3\pi \cdot k \cdot T}{32\kappa \cdot m_{\text{p}}}\right)^3}$; m_{p}.