$\delta X = X - X_0$	$X_0 \in \langle X - \Delta X, X + \Delta X \rangle$	$\bar{T} = \frac{T_1 + T_2 + T_3 + \ldots + T_n}{n}$	$s_T = \sqrt{\frac{(T_1 - \bar{T})^2 + (T_2 - \bar{T})^2 + \cdots + (T_n - \bar{T})^2}{n-1}}$
$s_{\bar{T}} = \frac{s_T}{\sqrt{n}}$	$F = f(A_1, A_2, \ldots, A_m)$	$\Delta F = \pm \sum_{i=1}^{m} \left\lvert \frac{\partial f(A_1, A_2, \ldots, A_m)}{\partial A_i} \right\rvert \cdot \lvert \Delta A_i \rvert$	
$F = const \cdot A^a \cdot B^b \cdot C^c \cdot \ldots$	$\Delta F = \pm F \cdot \left[\left\lvert a \cdot \frac{\Delta A}{A} \right\rvert + \left\lvert b \cdot \frac{\Delta B}{B} \right\rvert + \left\lvert c \cdot \frac{\Delta C}{C} \right\rvert + \ldots \right]$		

$y(x,t) = A \cdot \sin\left[\omega \cdot \left(t - \frac{x}{v_{fali}}\right)\right] = A \cdot \sin\left[2 \cdot \pi \cdot \left(\frac{t}{T} - \frac{x}{T \cdot v_{fali}}\right)\right] = A \cdot \sin\left[2 \cdot \pi \cdot \left(\frac{t}{T} - \frac{x}{\lambda}\right)\right] = A \cdot \sin(\omega \cdot t - k \cdot x)$				
$\omega = \frac{2 \cdot \pi}{T}$	$k = \frac{2 \cdot \pi}{\lambda}$	$\lambda = v \cdot T$	$I = \frac{E}{S \cdot \Delta t} = \frac{P}{S}$	$I = \frac{P}{4 \cdot \pi \cdot R^2}$
$v_{fali} = \sqrt{\frac{F_n}{\mu}}$	$v_{fali} = \sqrt{\frac{B}{\rho}}$	$d = n \cdot \lambda$	$d = (2 \cdot n + 1) \cdot \frac{\lambda}{2}$	$v = \lambda \cdot f$
$\frac{\sin(\alpha)}{\sin(\beta)} = \frac{v_\alpha}{v_\beta} = \frac{\lambda_\alpha}{\lambda_\beta} = const$	$\frac{v_\alpha}{\lambda_\alpha} = \frac{v_\beta}{\lambda_\beta} = f = const$	$L = 10 \cdot \log\left(\frac{I}{I_0}\right)$	$f' = f \cdot \frac{v_{dź} \pm v_{ob}}{v_{dź} \mp v_{źr}}$	

$\frac{\mathrm{d}n}{\mathrm{d}t} = -D \cdot S \cdot \frac{\mathrm{d}c}{\mathrm{d}x}$	$D = \frac{k \cdot T}{6 \cdot \pi \cdot r \cdot \eta}$	$\overline{\Delta x^2} = 2 \cdot D \cdot t$	$P = \frac{D}{\mathrm{d}x}$	
$\frac{\mathrm{d}n}{\mathrm{d}t} = P \cdot S \cdot (c_1 - c_2)$	$c_2 = \frac{c_0}{2} \cdot (1 - e^{-C \cdot D \cdot t})$	$C = \frac{2 \cdot A}{V \cdot \mathrm{d}x}$	$\ln\left(\frac{c_0}{c_0 - 2 \cdot c_2}\right) = C \cdot D \cdot t$	
$\pi = f \cdot c_m \cdot R \cdot T$	$\mu_i = \left(\frac{\partial G_i}{\partial n_i}\right)_{T,p,n_j \text{ dla } j \neq i}$	$H = U + p \cdot V$	$G = H - T \cdot S$	$F = U - T \cdot S$

$W = \sigma \cdot \Delta S$	$\sigma = \frac{F}{l}$	$\sigma = \frac{\rho \cdot V \cdot g}{2 \cdot \pi \cdot r \cdot n}$	$\frac{\sigma}{\sigma_0} = \frac{n_0 \cdot \rho}{n \cdot \rho_0}$	$\sigma = \frac{r \cdot h \cdot \rho \cdot g}{2 \cdot \cos(\alpha)}$	$\Delta p = \frac{2 \cdot \sigma}{R}$

$F = \eta \cdot S \cdot \frac{\Delta v}{\Delta x}$	$R = 6 \cdot \pi \cdot r \cdot v \cdot \eta$	$\Delta V = \frac{\pi \cdot r^4 \cdot \Delta t}{8 \cdot l \cdot \eta} \cdot \Delta p$	$\eta = \frac{2 \cdot r^2 \cdot g \cdot (\rho - \rho_c)}{9 \cdot v}$
$\eta_{wł} = \frac{\eta}{\eta_0} - 1$	$[\eta] = \lim_{c \to 0}\left(\frac{\eta_{wł}}{c}\right)$	$\frac{\eta}{\eta_0} = 1 + 2{,}5 \cdot \Phi$	$[\eta] = 2{,}5 \cdot \frac{N_A}{M} \cdot v_{cz}$
$r = \sqrt[3]{\frac{3 \cdot M}{10 \cdot \pi \cdot N_A} \cdot [\eta]}$	$\frac{\eta}{\eta_0} = \frac{t}{t_0} \cdot \frac{\rho}{\rho_0}$	$\frac{\rho}{\rho_0} = 1 + 0{,}23 \cdot c$	$\Phi = \frac{V_{sr}}{V_r}$

$E = E_{el} + E_{osc} + E_{rot}$	$h \cdot \nu = E_2 - E_1 = \Delta E_{el} + \Delta E_{osc} + \Delta E_{rot}$	$P = P_0 \cdot e^{-k \cdot d}$	$k = a_\lambda \cdot c$	
$\tau = \frac{P}{P_0}$	$\tau = \mathrm{e}^{-a_\lambda \cdot c \cdot d}$	$A = -\log(\tau)$	$A = a_\lambda \cdot \log(\mathrm{e}) \cdot c \cdot d$	$\varepsilon_\lambda = a_\lambda \cdot \log(\mathrm{e})$

$T = \frac{1}{f}$	$\omega = \frac{2 \cdot \pi}{T}$	$x(t) = A \cdot \sin(\omega \cdot t + \varphi)$	$v(t) = A \cdot \omega \cdot \cos(\omega \cdot t + \varphi)$
$a(t) = -A \cdot \omega^2 \cdot \sin(\omega \cdot t + \varphi) = -\omega^2 \cdot x(t)$	$F_{wyp}(t) = m \cdot a(t) = -m \cdot A \cdot \omega^2 \cdot \sin(\omega \cdot t + \varphi) = -\underbrace{k}_{m \cdot \omega^2} \cdot x(t)$		
$F_{wyp}(t) = -k \cdot x(t)$			

$\omega = \sqrt{\frac{k}{m}}$	$T = 2 \cdot \pi \cdot \sqrt{\frac{m}{k}}$	$T = 2 \cdot \pi \cdot \sqrt{\frac{\ell}{g}}$	$T = 2 \cdot \pi \cdot \sqrt{\frac{I}{m \cdot g \cdot h}}$
$E_{Kinetyczna} = \frac{m \cdot v^2}{2} = \underbrace{\frac{m}{2} \cdot A^2 \cdot \omega^2}_{E_{Kin\,Maks}} \cdot \cos^2(\omega \cdot t + \varphi)$		$E_{Potencjalna} = \underbrace{\frac{m}{2} \cdot A^2 \cdot \omega^2}_{E_{Pot\,Maks}} \cdot \sin^2(\omega \cdot t + \varphi)$	
$A(t) = A \cdot e^{-\delta \cdot t}$	$\omega' = \sqrt{\frac{k}{m} - \delta^2}$	$\omega_{wym} = \omega$	$g = 4 \cdot \pi^2 \cdot \frac{\ell}{T^2}$

$p = \frac{F}{S}$	$\rho = \frac{m}{V}$	$\gamma = \frac{m \cdot g}{V}$	$p = \rho \cdot g \cdot h$
$F_{parcia} = p \cdot S = S \cdot \rho \cdot g \cdot h$		$F_{Wyporu} = V_{\text{Zanurzonej Części}} \cdot \rho_{Cieczy} \cdot g$	

$h = \frac{\lambda}{c \cdot \rho}$	$C = m \cdot c$	$\Phi = \Phi_K + \Phi_R + \Phi_P + \Phi_T$
$\Phi_K = \alpha \cdot S \cdot (T_c - T_o)$	$\Phi_R = \sigma \cdot \varepsilon \cdot S \cdot (T_c^4 - T_o^4)$	$\Phi_P = k \cdot S \cdot (p_s - p_o)$
$\Phi_T = -\lambda \cdot S \cdot \frac{\Delta T}{\Delta x}$	$L(T) = L \cdot (1 + \alpha \cdot \Delta T)$	$\alpha = \frac{\Delta L}{L \cdot \Delta T}$

$p \cdot V = n \cdot R \cdot T$	$n = \frac{m}{M}$	$\Delta U = Q^{\downarrow} + W^{\downarrow}$	$W^{\downarrow} = -p \cdot \Delta V$
$Q = m \cdot c_{wł} \cdot \Delta T$	$c_{wł} = \frac{Q}{m \cdot \Delta T}$	$Q = m \cdot C_{faz}$	
$R = R_1 + R_2$	$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$	$R = \frac{U}{I}$	$R = \rho \cdot \frac{l}{s}$
$C = \frac{s \cdot \varepsilon_0}{d}$	$C = \frac{Q}{V}$	$E = \frac{F}{q}$	$W = q \cdot U$
$F = q(v \times B)$	$F = B \cdot I \cdot l \cdot \sin\alpha$	$P = U \cdot I$	$W = U \cdot I \cdot t$
$I = \frac{q}{t}$	$E_k = \frac{mv^2}{2}$	$E_p = mgh$	$p_c = p_s + \frac{1}{2}\rho v^2 = const.$
$p = m \cdot v$	$\sum_i p_i = 0$	$\Delta E = W$	$S_1 v_1 = S_2 v_2 = const.$

Wartości wybranych stałych fizycznych:

Liczba Avogadro .... $N_A = 6{,}02 \cdot 10^{23}\ \frac{1}{\text{mol}}$

Stała gazowa .... $R = 8{,}31\ \frac{\text{J}}{\text{mol} \cdot \text{K}}$

Stała Boltzmanna .... $k_B = \frac{R}{N_A} = 1{,}38 \cdot 10^{-23}\ \frac{\text{J}}{\text{K}}$

Ładunek elektronu .... $\text{e} = 1{,}60 \cdot 10^{-19}\text{C}$

Masa spoczynkowa elektronu .... $m_e = 9{,}11 \cdot 10^{-31}\text{kg}$

Stała Faradaya .... $F = e \cdot N_A = 96500\ \frac{\text{C}}{\text{mol}}$

Przyspieszenie ziemskie .... $g = 9{,}81\ \frac{\text{m}}{\text{s}^2}$

Podstawa logarytmu naturalnego .... $\text{e} \approx 2{,}72$

Przenikalność magnetyczna próżni ..$\mu_0 = 4 \cdot \pi \cdot 10^{-7}\ \frac{\text{T} \cdot \text{m}}{\text{A}}$

Przenikalność elektryczna próżni ..$\varepsilon_0 = 8{,}85 \cdot 10^{-12}\ \frac{\text{C}^2}{\text{N} \cdot \text{m}^2}$

Pi .... $\pi \approx 3{,}14$

Stała Plancka .... $h = 6{,}63 \cdot 10^{-34}\text{J} \cdot \text{s}$

Prędkość światła w próżni .... $c = 3{,}00 \cdot 10^8\ \frac{\text{m}}{\text{s}}$

Prędkość dźwięku w powietrzu .... $v_d = 331\ \frac{\text{m}}{\text{s}}$

Stała Stefana-Boltzmanna .... $\sigma = 5{,}67 \cdot 10^{-8}\ \frac{\text{W}}{\text{K}^4 \cdot \text{m}^2}$

Stała Wiena .... $b = 2{,}90 \cdot 10^{-3}\text{m} \cdot \text{K}$

Progowe natężenie dźwięku dla 1 kHz .... $10^{-12}\ \text{W}/\text{m}^2$

Progowe ciśnienie akustyczne dla 1 kHz ....$2 \cdot 10^{-5}$ Pa

Elektronowolt .... $1\ \text{eV} = 1{,}6 \cdot 10^{-19}\ \text{J}$