TABLA DE CONVERSIONES Y EQUIVALENCIAS ENTRE UNIDADES DE DIFERENTES SISTEMAS

Longitud

1 [m] = 0.001 [km]
= 100 [cm]
= 1000 [mm]
= $1x10^{6}$ [μm]
= $1x10^{10}$ [Å]
= 3.2808 [ft]
= 39.37 [in]
= 1.0936 [yd]
= 0.00062 [mi]
= 0.04971 [chain]
= 0.1988 [rd]
= 39370 [mil]

Masa

1 [kg] = 1000 [g]
= 2.2046 [lbm]
= 0.06852 [slug]
= 35.274 [oz]
= 32.151 [ozt]
= 5000 [ct]
= 0.001 [ton]
= 15432 [grain]
= 6.022 [utm]
= 0.10194 [geokilo]

1 [lbm] = 0.4536 [kg]
= 453.59 [g]
= 16 [ozt]
= 0.03108 [slug]
= 14.58 [oz]
= 2267.96 [ct]
= 7000 [grain]
= $2.73x10^{26}$ [utm]

Superficie

1 [m^2] = 10000 [cm^2]
= 1.196 [yd^2]
= 10.764 [ft^2]
= 1550 [in^2]
= $1x10^{-6}$ [km^2]
= $3.86x10^{-7}$ [mi^2]
= 0.00025 [acre]
= 0.0001 [Ha]

1 [ft^2] = 0.0929 [m^2]
= 929.03 [cm^2]
= 0.111 [yd^2]
= 144 [in^2]
= $9.29x10^{-8}$ [km^2]
= $2.3\ x10^{-5}$ [acre]
= $9.29x10^{-5}$ [Ha]
= $3.587x10^{-8}$ [mi^2]

Fuerza

1 [N] = 1 [kg m/s^2]
= $1x10^{5}$ [dina]
= 0.2248 [lb_f]
= 7.233 [pdl]
= 0.1020 [kp]
= $2.248x10^{-4}$ [kip]
= 101.97 [gf]

1 [lb_f] = 4.448 [N]
= 444822 [dina]
= 453.6 [gf]
= $1x10^{-3}$ [kip]
= 32.174 [pdl]
= 31.17 [$lb_m ft/s^2$]

Energía (Trabajo)

1 [J] = 1 [N m]
= $1x10^{7}$ [erg]
= $2.388\ x10^{-4}$ [kcal]
= 0.2388 [cal]
= $9.478x10^{-4}$ [BTU]
= 0.7376 [ft lb_f]
= $6.24x10^{18}$ [eV]
=10 [bar cm^3]

1 [BTU] = 1055 [J]
= $1.055x10^{10}$ [erg]
= 0.252 [kcal]
= 252 [cal]
= 778.17 [ft lb_f]
= $6.58x10^{21}$ [eV]

Potencia

1 [W] = 0.00134 [hp]
= 1 [J/s]
= $1x10^{7}$ [erg/s]
= 0.2388 [cal/s]
= 0.7376 [ft lb_f/s]
= 3.413 [BTU/hr]

1 [hp] = 745.7 [W]
= 550 [ft lb_f/s]
= $3.3x10^{4}$ [ft lb_f/min]
= 2545 [BTU/hr]

Volumen

1 [m3] = $1x10^{6}$ [cm^3]
= $1x10^{6}$ [ml]
= 1000 [l]
= 1.30795 [yd^3]
= 35.315 [ft^3]
= 61023.7 [in^3]
= 219.97 [gal_{UK}]
= 264.17 [gal_{US}]
= 1056.69 [qt]
= 2113.37 [pt]
= 33814 [oz_{fl}]
= 35195 [oz_{flUK}]
= 67628 [tbsp]
= 4226.75 [cup]
= 28.32 [bu]

1 [ft^3] = 0.02832 [m^3]
= 28316.8 [cm^3]
= 0.03704 [yd^3]
= 1728 [in^3]
= 28.31 [l]
= 6.22 [gal_{UK}]
= 7.48 [gal_{US}]
= 29.92 [qt]
= 59.84 [pt]
= 957.5 [oz_{fl}]
= 119.69 [cup]
= 996.6 [oz_{flUK}]
= 1915 [tbsp]

Presión

1 [Pa] = $1x10^{-5}$ [bar]
= $9.87x10^{-6}$ [atm]
= $1.45x10^{-7}$ [kpsi]
= $7.5x10^{-3}$ [torr]
= $7.5x10^{-3}$ [mm_{Hg}]
= $2.95x10^{-4}$ [in_{Hg}]

1 [bar] = $1x10^{5}$ [Pa]
= $1x10^{6}$ [dina/cm^2]
= 0.9897 [atm]
= 14.5 [psi]

1 [atm] = 1.013 [bar]
= $1.013x10^{5}$ [Pa]
= 14.69 [psi]
= 2117 [psf]
= 29.92 [in_{Hg}]
= 760 [mm_{Hg}]

Densidad

1 [g/cm^3] = 1000 [kg/cm^3]
= 62.43 [lbm/ft^3]

Volumen Específico

1 [m^3/kg] = 1000 [cm^3/g]
= 1 [l/g]
= 16 [ft^3/lbm]

1 [ft^3/lbm] = 62.5 [ml/g]
= 0.0625 (l/g)

Capacidad Calorífica

1 [J/g] = $1x10^{-3}$ [J/kg]
= $1x10^{7}$ [erg/g]
= 0.2388 [cal/g]
= 3345 [ft lb_f/lb_m]
= 0.4299 [BTU/lb_m]
= 10 [bar cm^3/g]

Capacidad Térmica Específica

1 [J/g K] = $1x10^{-3}$ [J/kg K]
= $1x10^{7}$ [erg/g K]
= 0.2388 [cal/g K]
= 0.2388 [BTU/lb_m R]
= 185.7 [ft lb_f/lb_m R]

1 [BTU/lb_m R] = 1 [cal/g K]
= 778.2 [ft lb_f/lb_m R]
= 4.186 [J/g K]
= 4186 [J/kg K]

Entropía

1 [BTU/R] = 1.899 [kJ/K]

1 [BTU/ºF] = 1.899 [kJ/K]

Entropía Específica

1 [BTU/lb_mºR] = 4.186 [KJ/kgK]

Energía Interna Específica

1 [BTU/lb] = 2.326 [kJ/kg]

Coeficiente de Transferencia de Calor

1 [BTU/hr ft^2ºF] = 5.678 [W/m^2K]