Easy set of SRSD-Feynman datasets. C: Constant, V: Variable, F: Float, I: Integer, P: Positive, N: Negative, NN: Non-Negative, I⋆: Integer treated as float due to the capacity of 32-bit integer, $\mathcal{U}$: Uniform distribution, $\mathcal{U}_{\log}$: Log-Uniform distribution.

Eq. ID	Formula	Symbols		SI Derived Unit	SI Unit	Properties		Distributions	
						Original	Ours	Original	Ours
I.12.1	$F = \mu N_{\mathrm{n}}$	F	Force of friction	N	$kg \cdot m \cdot s^{-2}$	V, F, P	V, F, P	N/A	N/A
		μ	Coefficient of friction	1	1	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
		N_{n}	Normal force	N	$kg \cdot m \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
I.12.4	$E = \frac{q_1}{4\pi\epsilon r^2}$	E	Magnitude of electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	N/A	N/A
		q_1	Electric charge	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		r	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
I.12.5	$F = q_2 E$	F	Force	N	$kg \cdot m \cdot s^{-2}$	V, F, P	V, F	N/A	N/A
		q_2	Electric charge	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		E	Electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
I.14.3	$U = mgz$	U	Potential energy	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F, P	V, F	N/A	N/A
		m	Mass	kg	kg	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
		g	Gravitational acceleration	m/s^{2}	$m \cdot s^{-2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	9.807×10^{0}
		z	Height	m	m	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
I.14.4	$U = \frac{k_{\mathrm{spring}} x^2}{2}$	U	Elastic energy	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F, P	V, F, P	N/A	N/A
		k_{spring}	Spring constant	N/m	$kg \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{2}, 10^{4})$
		x	Position	m	m	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
I.18.12	$\tau = rF\sin\theta$	τ	Torque	$N \cdot m$	$kg \cdot m^{2} \cdot s^{-2}$	V, F	V, F	N/A	N/A
		r	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		F	Force	N	$kg \cdot m \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		θ	Angle	rad	1	V, F, NN	V, F, NN	$\mathcal{U}(0,5)$	$\mathcal{U}(0, 2\pi)$
I.18.16	$L = mrv\sin\theta$	L	Angular momentum	$kg \cdot m^{2}/s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F	V, F	N/A	N/A
		m	Mass	kg	kg	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		r	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		v	Velocity	m/s	$m \cdot s^{-1}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		θ	Angle	rad	1	V, F, P	V, F, NN	$\mathcal{U}(1,5)$	$\mathcal{U}(0, 2\pi)$
I.25.13	$V = \frac{q}{C}$	V	Voltage	V	$kg \cdot m^{2} \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	N/A	N/A
		q	Electric charge	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-5}, 10^{-3})$
		C	Electrostatic Capacitance	F	$kg^{-1} \cdot m^{-2} \cdot s^{4} \cdot A^{2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-5}, 10^{-3})$
I.26.2	$n = \frac{\sin\theta_1}{\sin\theta_2}$	n	Relative refractive index	1	1	V, F, NN	V, F, P	$\mathcal{U}(0,1)$	N/A
		θ_1	Refraction angle 1	rad	1	V, F	V, F, NN	N/A	$\mathcal{U}(0, \frac{\pi}{2})$
		θ_2	Refraction angle 2	rad	1	V, F, P	V, F, NN	$\mathcal{U}(1,5)$	$\mathcal{U}(0, \frac{\pi}{2})$
I.27.6	$f = \frac{1}{\frac{1}{d_1} + \frac{n}{d_2}}$	f	Focal length	m	m	V, F, P	V, F, P	N/A	N/A
		d_1	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		n	Refractive index	1	1	V, F, P	V, F, P,	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		d_2	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
I.30.5	$d = \frac{\lambda}{n\sin\theta}$	d	Interplanar distance	m	m	V, F, P	V, F, P	$\mathcal{U}(2,5)$	N/A
		λ	Wavelength of X-ray	m	m	V, F, P	V, F, P	$\mathcal{U}(1,2)$	$\mathcal{U}_{\log}(10^{-11}, 10^{-9})$
		n	Number of phase difference	1	1	V, F, P	V, I, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
		θ	Incidence/Reflection angle	rad	1	V, F, P	V, F, NN	N/A	$\mathcal{U}(0, \frac{\pi}{2})$
I.43.16	$v = \mu q \frac{V}{d}$	v	Velocity	m/s	$m \cdot s^{-1}$	V, F, P	V, F	N/A	N/A
		μ	Ionic conductivity	s/kg	$kg^{-1} \cdot s$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-6}, 10^{-4})$
		q	Electric charge of ions	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-11}, 10^{-9})$
		V	Voltage	V	$kg \cdot m^{2} \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		d	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
I.47.23	$c = \sqrt{\frac{\gamma P}{\rho}}$	c	Velocity of sound	m/s	$m \cdot s^{-1}$	V, F, P	V, F, P	N/A	N/A
		γ	Heat capacity ratio	1	1	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}(1,2)$
		P	Atmospheric pressure	Pa	$kg \cdot m^{-1} \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}(0.5 \times 10^{-5}, 1.5 \times 10^{-5})$
		ρ	Density of air	$kg \cdot m^{-3}$	$kg \cdot m^{-3}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}(1,2)$
II.2.42	$J = \kappa(T_2 - T_1)\frac{A}{d}$	J	Rate of heat flow	W	$kg \cdot m^{2} \cdot s^{-3}$	V, F	V, F	N/A	N/A
		κ	Thermal conductivity	$W/(m \cdot K)$	$kg \cdot m \cdot s^{-3} \cdot K^{-1}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		T_2	Temperature	K	K	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{1}, 10^{3})$
		T_1	Temperature	K	K	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{1}, 10^{3})$
		A	Area	m^2	m^2	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-4}, 10^{-2})$
		d	Length	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
II.3.24	$h = \frac{W}{4\pi r^2}$	h	Heat flux	J/m^2	$kg \cdot s^{-2}$	V, F, P	V, F	N/A	N/A
		W	Work	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
		r	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
II.4.23	$\phi = \frac{q}{4\pi\epsilon r}$	ϕ	Electric potential	V	$kg \cdot m^{2} \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	N/A	N/A
		q	Electric charge	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		r	Distance	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
II.8.31	$u = \frac{\epsilon E^2}{2}$	u	Energy	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F, P	V, F, P	N/A	N/A
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		E	Magnitude of electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{1}, 10^{3})$
II.10.9	$E = \frac{\sigma_{\mathrm{free}}}{\epsilon}\frac{1}{1+\chi}$	E	Electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	N/A	N/A
		σ_{free}	Surface charge	C/m^2	$m \cdot^{-2} \cdot s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		χ	Electric susceptibility	1	1	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
II.13.17	$B = \frac{1}{4\pi\epsilon c^2}\frac{2I}{r}$	B	Magnitude of the magnetic field	T	$kg \cdot s^{-2} \cdot A^{-1}$	V, F, P	V, F	N/A	N/A
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		c	Speed of light	m/s	$m \cdot s^{-1}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	2.998×10^{8}
		I	Electric current	A	A	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		r	Radius	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
II.15.4	$U = -\mu B\cos\theta$	U	Energy from magnetic field	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F	V, F	N/A	N/A
		μ	Magnetic dipole moment	J/T	$m^{2} \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-25}, 10^{-23})$
		B	Magnetic field strength	T	$kg \cdot s^{-2} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		θ	Angle	rad	1	V, F, P	V, F, NN	$\mathcal{U}(1,5)$	$\mathcal{U}(0, 2\pi)$
II.15.5	$U = -pE\cos\theta$	U	Energy	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F	V, F	N/A	N/A
		p	Electric dipole moment	$C \cdot m$	$m \cdot s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-22}, 10^{-20})$
		E	Magnitude of electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{1}, 10^{3})$
		θ	Angle	rad	1	V, F, P	V, F, NN	$\mathcal{U}(1,5)$	$\mathcal{U}(0, 2\pi)$
II.27.16	$L = \epsilon c E^2$	L	Radiance	$W/(sr \cdot m^2)$	$kg \cdot s^{-3}$	V, F, P	V, F	N/A	N/A
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		c	Speed of light	m/s	$m \cdot s^{-1}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	2.998×10^{8}
		E	Magnitude of electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
II.27.18	$u = \epsilon E^2$	u	Energy density	J/m^3	$kg \cdot m^{-1} \cdot s^{-2}$	V, F, P	V, F, P	N/A	N/A
		ϵ	Vacuum permittivity	F/m	$kg^{-1} \cdot m^{-3} \cdot s^{4} \cdot A^{2}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	8.854×10^{-12}
		E	Magnitude of electric field	V/m	$kg \cdot m \cdot s^{-3} \cdot A^{-1}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
II.34.11	$\omega = g\frac{gB}{2m}$	ω	Angular frequency	rad/s	$rad \cdot s^{-1}$	V, F, P	V, F, P	N/A	N/A
		g	g-factor	1	1	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}(-1,1)$
		q	Electric charge	C	$s \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-11}, 10^{-9})$
		B	Magnetic field strength	T	$kg \cdot s^{-2} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-9}, 10^{-7})$
		m	Mass	kg	kg	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-30}, 10^{-28})$
II.34.29b	$U = 2\pi g\mu B\frac{J_z}{h}$	U	Energy	J	$kg \cdot m^{2} \cdot s^{-2}$	V, F, P	V, F	N/A	N/A
		g	g-factor	1	1	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}(-1,1)$
		μ	Bohr magneton	J/T	$m^{2} \cdot A$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	$9.2740100783 \times 10^{-24}$
		B	Magnetic field strength	T	$kg \cdot s^{-2} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		J_z	Element of angular momentum	$J \cdot s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-26}, 10^{-22})$
		h	Planck constant	$J \cdot s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	6.626×10^{-34}
II.38.3	$F = YA\frac{\Delta l}{l}$	F	Force	N	$kg \cdot m \cdot s^{-2}$	V, F, P	V, F	N/A	N/A
		Y	Young's modulus	Pa	$kg \cdot m^{-1} \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		A	Area	m^2	m^2	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-4}, 10^{-2})$
		δl	Displacement	m	m	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		l	Length	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
II.38.14	$\mu = \frac{Y}{2(1+\sigma)}$	μ	Rigidity modulus	Pa	$kg \cdot m^{-1} \cdot s^{-2}$	V, F, P	V, F, P	N/A	N/A
		Y	Young's modulus	Pa	$kg \cdot m^{-1} \cdot s^{-2}$	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-1}, 10^{1})$
		σ	Poisson coefficient	1	1	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-2}, 10^{0})$
III.7.38	$\omega = \frac{4\pi\mu B}{h}$	ω	Precession frequency	rad	1	V, F, P	V, F	N/A	N/A
		μ	Magnetic moment	J/T	$m^{2} \cdot A$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-11}, 10^{-9})$
		B	Magnetic flux density	T	$kg \cdot s^{-2} \cdot A^{-1}$	V, F, P	V, F	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-3}, 10^{-1})$
		h	Planck constant	$J \cdot s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	6.626×10^{-34}
III.12.43	$J = \frac{mh}{2\pi}$	J	Spin magnetic moment	$J \cdot s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F, P	V, F, P	N/A	N/A
		m	Spin state	1	1	V, F, P	V, I, NN	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
		h	Planck constant	$J \cdot s$	$kg \cdot m^{2} \cdot s^{-1}$	V, F, P	C, F, P	$\mathcal{U}(1,5)$	6.626×10^{-34}
III.15.27	$k = \frac{2\pi}{Nb}s$	k	Wavenumber	m^{-1}	m^{-1}	V, F, P	V, F	N/A	N/A
		s	Parameter of state	1	1	V, F, P	V, I	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
		N	Number of atoms	1	1	V, F, P	V, I, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{0}, 10^{2})$
		b	Lattice constant	m	m	V, F, P	V, F, P	$\mathcal{U}(1,5)$	$\mathcal{U}_{\log}(10^{-10}, 10^{-8})$