

SI DERIVED UNIT WITH SPECIAL NAMES			
Quantity	Unit	Symbol	Formula
Frequency (of a periodic phenomenon)	hertz	Hz	1/s
Force	newton	N	kg·m/s <sup>2</sup>
Pressure, stress	pascal	Pa	N/m <sup>2</sup>
Energy, work, quantity of heat	joule	J	N·m
Power, radiant flux	watt	W	J/s
Quantity of electricity, electric charge	coulomb	C	A·s
Electric potential, potential difference, electromotive force	volt	V	W/A
Capacitance	farad	F	C/V
Electric resistance	ohm	Ω	V/A
Conductance	siemens	S	A/V
Magnetic flux	weber	Wb	V·s
Magnetic flux density	tesla	T	Wb/m <sup>2</sup>
Inductance	henry	H	Wb/A
Luminous flux	lumen	lm	cd·sr
Illuminance	lux	lx	lm/m <sup>2</sup>
Activity (of radionuclides)	becquerel	Bq	1/s
Absorbed dose	gray	Gy	J/kg

**CONVERSION FACTORS**

To convert	To	Multiply by
<b>LENGTH</b>		
1 mile (U.S. statute)	km	1.609 347
1 yd	m	0.9144
1 ft	m	0.3048
	mm	304.8
1 in	mm	25.4
<b>AREA</b>		
1 mile <sup>2</sup> (U.S. statute)	km <sup>2</sup>	2.589 99
1 acre (U.S. survey)	ha	0.404 687
	m <sup>2</sup>	4046.87
1 yd <sup>2</sup>	m <sup>2</sup>	0.836 127
1 ft <sup>2</sup>	m <sup>2</sup>	0.092 903
1 in <sup>2</sup>	mm <sup>2</sup>	645.16
<b>VOLUME, MODULUS OF SECTION</b>		
1 acre ft	m <sup>3</sup>	1233.49
1 yd <sup>3</sup>	m <sup>3</sup>	0.764 555
100 board ft	m <sup>3</sup>	0.235 974
1 ft <sup>3</sup>	m <sup>3</sup>	0.028 316 8
	L (dm <sup>3</sup> )	28.3168
1 in <sup>3</sup>	mm <sup>3</sup>	16 387.1
	mL (cm <sup>3</sup> )	16.3871
1 barrel (42 U.S. gallons)	m <sup>3</sup>	0.158 987