

# COMMON CONVERSIONS AND CONSTANTS

## MAIN IMPERIAL CONVERSIONS

Measurement	To convert:	Multiply by: (unless otherwise stated)		To give equivalent in:
<b>Area</b>	in <sup>2</sup>	6.4516		cm <sup>2</sup>
	ft <sup>2</sup>	9.2903	x10 <sup>2</sup>	cm <sup>2</sup>
	yd <sup>2</sup>	8.3613	x10 <sup>-1</sup>	m <sup>2</sup>
		9.0000		ft <sup>2</sup>
	ac	4.0469	x10 <sup>3</sup>	m <sup>2</sup>
		4.0469	x10 <sup>-1</sup>	ha
		4.8400	x10 <sup>3</sup>	yd <sup>2</sup>
	mi <sup>2</sup>	2.5900	x10 <sup>2</sup>	ha
		2.5900		km <sup>2</sup>
	6.4000	x10 <sup>2</sup>	ac	
<b>Length</b>	in	2.5400		cm
	ft	3.0480	x10	cm
		1.2000	x10	in
	yd	9.144	x10 <sup>-1</sup>	m
		3000		ft
	mi	1.6093		km
		5.280	x10 <sup>3</sup>	ft
		1.760	x10 <sup>3</sup>	yd
	<b>Mass</b>	grain	6.47989	x10 <sup>-5</sup>
oz		2.8349	x10	g
lb		4.5359	x10 <sup>-1</sup>	kg
cwt		5.08023	x10	kg
imperial ton (long ton)		1.0160	x10 <sup>3</sup>	kg
		1.0160		t
		2.2400	x10 <sup>3</sup>	lb
US ton (short ton)		9.07 18	x10 <sup>2</sup>	kg
		9.0718	x10 <sup>-1</sup>	t
		2.0000	x10 <sup>3</sup>	lb
<b>Power</b>	ft lbf s <sup>-1</sup>	1.3558		w
	hp (UK)	7.4570	x10 <sup>2</sup>	w
		1.0139		hp (metric)
<b>Pressure</b>	lbf in <sup>-2</sup> (psi)	7.031	x10 <sup>-2</sup>	kgf cm <sup>-2</sup>
		6.8948		kPa (or kN m <sup>-2</sup> )
		6.8948	x10 <sup>-2</sup>	bars
		9.71	x10 <sup>-4</sup>	cm (head of water)
		6.806	x10 <sup>2</sup>	atmospheres (atm)
	atmosphere (atm)	1.030	x10 <sup>3</sup>	cm (head of water)
		1.013		bars
		1.033		kgf cm <sup>-2</sup>
		1.4693	x10 <sup>3</sup>	lbf in <sup>-2</sup> (psi)
	in (head of Hg)	3.386	x10 <sup>-2</sup>	bar
	<b>Temperature</b>	°F	subtract 32 then x by 5/9	
<b>Velocity</b>	in s <sup>-1</sup>	2.54	x10 <sup>2</sup>	m s <sup>-2</sup>
	ft s <sup>-1</sup> (fps)	1.0973	x10 <sup>4</sup>	cm h <sup>-1</sup>
		3.048	x10 <sup>-1</sup>	m s <sup>-1</sup>
		2.6335	x10 <sup>2</sup>	m day <sup>-1</sup>
		1.0973	x10 <sup>-1</sup>	km h <sup>-1</sup>
		6.818	x10 <sup>-1</sup>	mi h <sup>-1</sup>
	ft min <sup>-1</sup>	5.03	x10 <sup>-3</sup>	m s <sup>-1</sup>
		5.14773	x10 <sup>-1</sup>	m s <sup>-1</sup>
	knots (UK)			