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Farmers' Convenient Conversion Factor References

CONVERSION FORMULAE

To use the conversion formulae, multiply the Imperial measurement by the factor beside the conversion you wish to make.

If you wish to convert Metric measure into Imperial measure, simply divide by the same factor.

LENGTH

To convert	Multiply by
Milli-inches into micrometers	25.4
Inches into millimeters	25.4
Inches into centimeters	2.54
Inches into meters	0.0254
Feet into millimeters	304.8
Feet into centimeters	30.48
Feet into meters	0.3048
Yards into meters	0.9144
Fathoms into meters	1.8288
Chains into meters	20.1168
Furlongs into meters	201.168
Miles, statute into kilometers	1.609344
Miles, nautical into kilometers	1.852

VOLUME

To convert	Multiply by
Cubic inches into cubic centimeters	16.387064
Cubic inches into litres	0.016387
Cubic feet into cubic meters	0.0283168
Cubic feet into litres	28.316847
Cubic yards into cubic meters	0.7645549
Teaspoons into millimeters	4.93
UK quarts into litres	1.1365225
UK gallons into litres	4.54609
UK fluid ounces into cubic centimeters	28.413063
US pints into litres	0.47
US quarts into litres	0.95
US gallons into litres	3.79

AREA

To convert	Multiply by
Square inches into square millimeters	645.16
Square inches into square centimeters	6.4516
Square feet into square centimeters	929.0304
Square feet into square meters	0.092903
Square yards into square meters	0.836127
Square yards into ares (0.01 hectare)	0.0083613
Square miles into square kilometers	2.589988
Acres into square meters	4046.8564
Acres into hectares	0.4046856

MASS

To convert

Grains into milligrams

Grains into metric carats

Grains into grams

Pennyweights into grams

Ounces into grams

Ounces, troy into grams

Ounces into kilograms

Pounds into kilograms

Stones into kilograms

Hundredweights into kilograms

Tons into kilograms

Tons into metric tonnes

Tahils into grams

Kati into kilograms

Multiply by

64.79891

0.323995

0.064799

1.555174

28.349523

31.103477

0.0283495

0.4535924

6.3502932

50.802345

1016.0469

1.01605

37.799

0.60479

TEMPERATURE

To convert from Celsius to Fahrenheit:

$$F = 9/5 \times \text{Celsius} + 32$$

To convert from Fahrenheit to Celsius:

$$C = 5/9 \times (\text{Fahrenheit} - 32)$$

METRIC CONVERSIONS

A	B	A to B	B to A
Ounces	grams	A x 28.3	B x 0.353
Pounds	kilograms	A x 0.454	B x 2.20
Hundredweights	kilograms	A x 50.8	B x 0.0197
Tons (long)	kilograms	A x 1016	B x 0.0009842
Tons (long)	tonnes	A x 1.02	B x 0.984
Square inches	square centimeters	A x 6.45	B x 0.155
Square feet	square meters	A x 0.0929	B x 10.8
Acres	hectares	A x 0.405	B x 2.47
Inches	centimeters	A x 2.54*	B x 0.394
Feet	metres	A x 0.305	B x 3.28
Yards	metres	A x 0.914	B x 1.09
Miles	kilometers	A x 1.61	B x 0.621
Fluid ounces	milliliters	A x 28.4	B x 0.0352
Gallons (Imperial)	litres	A x 4.55	B x 0.220
Pounds per inch ²	kilograms/cm ²	A x 0.0703	B x 14.2
Pounds per inch ²	kilopascals	A x 6.89	B x 0.145
Pounds per acre	kilograms/hectare	A x 1.12	B x 0.892
Hundredweight/acre	kilograms/hectare	A x 125	B x 0.00797
Kilograms/hectare	milligrams/m ²	A x 100*	B x 0.01*
Milligrams/ft ²	milligrams/m ²	A x 10.8	B x 0.929
Gallons (imperial)/acre	litres/hectare	A x 11.2	B x 0.0890
Pounds per bushel	kg/hectoliter	A x 1.25	B x 0.802
Fluid oz./100 gallons	milliliters/100 litres	A x 6.25	B x 0.160
Pints/100 gallons	milliliters/100 litres	A x 125	B x 0.00800
Ounces/imp. gallons	grams/litre	A x 6.24	B x 0.160
Pounds/100 gallons	kilograms/100 litres	A x 0.0998	B x 10.0
Feet/second	metres/second	A x 0.305	B x 3.28
Miles/hour	kilometers/hour	A x 1.61	B x 0.621

Notes: [1] All the numbers given to three significant figures except those for tons to kilograms and vice versa, which are to four figures in order to give the extra accuracy when this is required.

[2] Those figures followed by asterisk (*) indicate exact values.

MOTORING CONVERSIONS

These conversion charts indicate relative values. They are intended only as a guide and should not be used to calculate higher values where more than three decimal places would not be needed.

FUEL CONSUMPTION

L/100km = Mile/gal

6.00 = 47.06

7.00 = 40.34

8.00 = 35.30

8.50 = 33.22

9.00 = 31.38

9.50 = 29.73

10.00 = 28.24

10.50 = 26.90

11.00 = 25.67

11.50 = 24.56

12.00 = 23.53

12.50 = 22.59

13.00 = 21.72

13.50 = 20.92

14.00 = 20.17

14.50 = 19.48

15.00 = 18.83

16.00 = 17.65

17.00 = 16.61

18.00 = 15.69

19.00 = 14.86

20.00 = 14.12

21.00 = 13.44

22.00 = 12.83

23.00 = 12.27

Mile/gal = L/100km

10.00 = 28.248

12.00 = 23.540

14.00 = 20.177

16.00 = 17.655

18.00 = 15.693

20.00 = 14.124

22.00 = 12.840

24.00 = 11.710

26.00 = 10.864

28.00 = 10.0888

30.00 = 9.416

32.00 = 8.827

34.00 = 8.308

36.00 = 7.846

38.00 = 7.433

40.00 = 7.062

42.00 = 6.726

43.00 = 6.561

44.00 = 6.420

45.00 = 6.278

46.00 = 6.137

47.00 = 5.996

48.00 = 5.855

49.00 = 5.713

50.00 = 5.572

SPEED

Km/h = mile/h

5.00 = 3.12

10.00 = 6.25

15.00 = 9.37

20.00 = 12.50

25.00 = 15.62

30.00 = 18.75

35.00 = 21.87

40.00 = 25.00

45.00 = 28.12

50.00 = 31.25

55.00 = 34.37

60.00 = 37.50

65.00 = 40.62

70.00 = 43.75

75.00 = 46.87

80.00 = 50.00

90.00 = 56.25

100.00 = 62.50

110.00 = 68.75

120.00 = 75.00

130.00 = 81.25

140.00 = 87.50

150.00 = 93.75

Mile/h = km/h

10.00 = 16.00

15.00 = 24.00

20.00 = 32.00

25.00 = 40.00

30.00 = 48.00

35.00 = 56.00

40.00 = 64.00

45.00 = 72.00

50.00 = 80.00

55.00 = 88.00

60.00 = 96.00

65.00 = 104.00

70.00 = 112.00

75.00 = 120.00

80.00 = 128.00

85.00 = 136.00

90.00 = 144.00

95.00 = 152.00

100.00 = 160.00

110.00 = 176.00

120.00 = 192.00

130.00 = 208.00

140.00 = 224.00

TYRE PRESSURE

 $\text{Lbf/in}^2 = \text{kPa}$

25.00 = 172.36

26.00 = 179.26

27.00 = 186.16

28.00 = 193.05

29.00 = 199.95

30.00 = 206.84

31.00 = 213.74

32.00 = 220.63

33.00 = 227.53

34.00 = 234.42

35.00 = 241.31

 $\text{kPa} = \text{lbf/in}^2$

155.00 = 22.48

160.00 = 23.20

165.00 = 23.93

170.00 = 24.66

175.00 = 25.38

180.00 = 26.11

185.00 = 26.83

190.00 = 27.56

195.00 = 28.28

200.00 = 29.00

205.00 = 29.73

METRICS ON THE FARM – Common comparisons

Rough, quick conversion from imperial to metric

LENGTH (millimetre, centimetre, metre and kilometre)1 millimetre is about $\frac{1}{25}$ inch Inch x 25 = millimetres

1 matchbox is 53 x 36 millimetres

1 centimetre is just over $\frac{3}{8}$ inch12 inches are about 30 centimetres Inch x $\frac{10}{4}$ = centimetres

1 hand (4 in) is about 10 centimetres

1 metre is about 1 yard

100 yards are about 90 metres Feet x $\frac{3}{10}$ = metres

1 chain is about 20 metres Chain x 20 = metres

1 furlong is about 200 metres

1 kilometre is just over $\frac{1}{2}$ mile or nearly 5 furlongs10 miles is about 16 kilometres Miles x $\frac{8}{5}$ = kilometres**MASS (gram, kilogram and tonne)**1 gram is about $\frac{1}{30}$ ounce

1 ounce is just over 28 grams Ounce x 30 = grams

1 tablespoon of sugar is 15 grams

1 kilogram is almost $2\frac{1}{4}$ poundsA 50lb lamb is about 23 kilograms Pound x $\frac{4}{9}$ = kilograms

A gallon of milk weighs nearly 5 kilograms (4.7 kilograms)

1 hundredweight is just over 50 kilograms Hundredweight x 50 = kilograms

1 tonne is almost equal to a long ton Tons (long) x 1 = t

AREA (square centimetre, square metre and hectare)

1 square centimetre is just under $\frac{1}{8}$ square inch

Square inch $\times \frac{20}{3} = \text{centimetres}^2$

Square inch is just about 6.5 centimetres²

1 square metre is a little over 1 square yard and nearly 11 square feet

A rugby field (8250 square yards) is about 6900 metres²

Square yards $\times \frac{5}{6} = \text{metres}^2$

1 perch is about 25 metres²

Perch $\times 25 = \text{metres}^2$

1 hectare is just under $2\frac{1}{2}$ acres

10 acres are about 4 hectares

Acres $\times \frac{4}{10} = \text{hectare}$

VOLUME (millilitre, litre and cubic metre)

1 fluid ounce is about 28 millilitres

Fluid ounce $\times 30 = \text{millilitre}$

1 pint is about 568 millilitres

1 litre is about $1\frac{3}{4}$ pints

1 gallon is about 4.5 litres

A 100 gallon plunge dip holds about 450 litres

Gallons $\times \frac{9}{2} = \text{litres}$

A flagon holds about 2.25 litres

1 cubic metre is about $1\frac{3}{4}$ cubic yards and about $27\frac{1}{2}$ bushels

The volume of an average wool bale on the farm is 0.8 metres³

($\frac{8}{10}$ or $\frac{4}{5}$ of a cubic metre)

Cubic yard $\times \frac{3}{4} = \text{metres}^3$

1 acre foot is almost 1250 metres³

MASS PER UNIT AREA

1 pound/acre is about 1 kilogram/hectare

$\text{lb/ac} \times 11/10 = \text{kg/ha}$

1 hundredweight/acre is 125 kilograms/hectare

$\text{cwt/ac} \times 500/4 = \text{kg/ha}$

VOLUME / AREA

1 pint/acre is about 1.4 litres/hectare

1 gallon/acre is about 11 litres/hectare

$\text{Gallons/acre} \times 11 = \text{litres/ha}$

BOUNDARY FENCES – Legal requirements

Any person desiring to compel any other person to contribute to the erection of a fence under the Fencing Act, 1978, must serve on him a Notice to Fence; details are available in copies of the Act, which can be obtained from Government bookshops.

WEIGHTS AND LENGTHS OF GALVANISED FENCING WIRE

Diameter	kg per km	Length of 25kg	Length of 1 tonne
4.00	98.8	253	10.120
3.15	61.3	408	16.320
2.50	38.6	648	25.920

BREEDING TABLES GESTATION

Animal	Average period (days)	Range (days)
Cow (9 months plus 9 days)	282	279 – 289
Ewe (5 month less 5 days)	150	144 – 156
Sow (3 months 3 weeks 3 days)	114	110 – 118
Bitch	63	58 – 70
Mare	336	320 – 355
Hind (red)	233	230 – 241
Hind (fallow)	229	226 – 234
Goat	150	145 – 155

PULSE

The most convenient place for taking the pulse is at the jaw.

The tips of the first and second fingers should be pressed against the artery which runs round the angle of the base of the jaw bone.

With some animals the pulse can be felt more efficiently by holding the hand against the wall of the chest on the left side.

SOWING RATE

Seed Rate kg/ha

FORGE CROPS

Turnips	0.7 – 1.10
Swedes	0.8 – 1.20
ChouMoellier	2.0 – 5.0
Kale	2.0 – 5.0
Rape	2.0 – 4.0
Pasja	3.0 – 5.0

GREEN-FEED CROPS**CEREAL GREEN-FEEDS**

Ryecorn	125
Barley	100 – 120
Oats	100 – 120

OTHERS

Maize	
– Green-feed	84 – 100
– Silage	28 – 33.6
Japanese Millet	11 – 22.5
Sorghum Hybrids	22.5 – 35.0
Fodder Beet	1.7 – 2.24
Marigolds	
– Rubbed Seed	1.7 – 2.24
– Unrubbed Seed	4.4 – 6.75
Lupins	135 – 200

Also check local variations

Seed Rate kg/ha

SEED CROPS

Barley	120 – 200
Maize	28 – 33.6
Oats	
– Autumn Sown	90 – 112
– Spring Sown	135 – 180
Wheat	
– Autumn Sown	100 – 110
– Spring Sown	135 – 170
Peas	200 – 270
Beans	90 – 100
Potatoes	1875 – 2500
Linseed	50 – 62
Soya Bean	70 – 85
Sunflower	6.72 – 11.2
Lucerne	6.72 – 11.2
– Green-feed	84 – 100
– Silage	28 – 33.6

RYEGRASS SPECIES

Perennial	20 – 25
Tama & Moata	25 – 30



Where service isn't promised – it is delivered

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