

Time is kept on board ship by striking a bell every half hour, the rule being—One stroke of the bell at half-past four, half-past eight, and half-past twelve, one more stroke being added for each half-hour until eight strokes of the bell or eight bells are reached at four, eight and twelve. The dog watches are different, 6.30 p.m. being one bell, 7 p.m. two bells, and 7.30 p.m. three bells, but 8 o'clock is always eight bells.

MENSURATION OF SURFACES AND SOLIDS.

The circumference of a circle = diameter $\times 22/7$ (or 3.1416); area of circle = square of the diameter $\times 0.7854$.

Area of sector of circle = length of arc $\times \frac{1}{2}$ radius.

Area of segment of circle = area of sector less area of triangle.

Area of a square, rhombus or rhomboid = base $\times$ height.

Area of a triangle = $\frac{1}{2}$ base $\times$ perpendicular height.

Area of equilateral triangle = square of side $\times 0.433$.

Area of any right-lined figure of four or more unequal sides is found by dividing it into triangles, finding area of each and adding together.

Area of a parabola = base $\times$ height $\times \frac{2}{3}$.

Area of an ellipse = long axis $\times$ short axis $\times 0.7854$.

Volume of a pyramid = area of base $\times$ one-third of height.

Volume of a sphere = cube of diameter $\times 0.5236$.

RAINFALL.

The depth of rainfall in inches, multiplied by 3,630, equals number of cubic feet per square acre; multiplied by 22,688, equals number of gallons per square acre.

Thus—

Inches.		Cubic feet per acre.		Gallons per acre.		Tons per acre.
1	=	3,630	=	22,688	=	101.3
2	=	7,260	=	45,376	=	202.6
3	=	10,890	=	68,064	=	303.9
5	=	18,150	=	113,440	=	506.5

1 cubic foot of water = $6\frac{1}{4}$ gallons = $62\frac{1}{2}$ lb. = 1,000 oz. = about $\frac{3}{4}$ bushel.
 $40 \times 10 \times 10$ feet (4,000 cubic feet) = 25,000 gallons. 1 cubic inch of water = $\frac{3}{4}$ oz. by weight. 1 pint of water = 20 oz. by weight. 1 gallon of water = 10 lb. by weight. 1 ton of water = 224 gallons. 1 oz. of water = 1 oz. by weight. 1 lb. of water measures $27\frac{3}{4}$ cubic inches. 1 ordinary tumbler holds 10 liquid ounces. 1 tablespoon holds $\frac{1}{2}$ liquid ounce. 1 teaspoon holds 1 liquid drachm or 60 drops. 4 teaspoonsful = 1 liquid ounce.