

CLOTH MEASURE.

2½ inches...	1 nail	4 quarters...	1 yd.
4 nails.....	1 qt. of yd.	5 quarters...	1 ell Eng.

LONG MEASURE.

3 barleycorns.....	1 inch.
12 inches.....	1 foot.
3 feet.....	1 yard.
5½ yards.....	1 rod, pole, or perch.
40 poles or rods.....	1 furlong.
8 furlongs, or 1760 yds.	1 mile.

A hand is 4 inches; a fathom, 6 feet, 120 fathoms 1 cable's length; a cubit, 1½ feet; 69½ statute, or 60 sea-miles, 1 degree, 360 degrees, a great circle of the earth; 3 miles are a league; 1 link is equal to 7.92 inches; 800=792 inches, or 66 feet, or 4 rods, or 1 chain; 80 chains=320 rods, or 1 mile.

An English or American mile is 5,280 feet; a Dutch mile, 24,303 feet; a Roman, 4,884 feet; an Arabian, 6,444 feet, a Persian parasang, 18,108 feet; 4½ English miles make 1 German, 2½ English, 1 French league; the Spanish and Polish mile is about 3½ English miles; the Russian mile or verst is about ½ of an English mile; the Hungarian, Danish and Swiss mile is between 5 and 6 English miles; the Swedish nearly 7.

SURVEYORS' LONG MEASURE.

7.92 inches (in) make.....	1 link.....	1.
25 l	"	1 rd. or pole rd or p.
4 rd., or 66 ft.....	1 chain.....	ch.
80 chains.....	1 mile.....	mi.

SQUARE MEASURE.

144 square inches.....	1 square foot.
9 square feet.....	1 square yard.
30½ square yards.....	1 square rod or perch.
36 square yards.....	1 rood of building.
40 square rods.....	1 rood.
4 rods.....	1 acre.
640 acres.....	1 square mile.
6 square rods or 10 square chains.....	1 acre.

NAUTICAL MEASURE.

6 feet.....	1 fathom.
120 feet.....	1 cable in length.
110 fathoms or 660 feet.....	1 furlong.
6075½ feet.....	1 nautical mile.
3 nautical miles.....	1 league.
20 leagues or 60 geometrical miles.....	1 degree.
360 degrees.....	The earth's circumference = 24855½ miles, nearly

The nautical mile is 795½ feet longer than the common mile.

CUBIC MEASURE.

1728 cubic inches.....	1 cubic foot.
27 cubic feet.....	1 cubic yard.
16 cubic feet.....	1 cord ft. or 1 ft. of wood.
8 cord feet or 128 cubic feet.....	1 cord.
40 ft. of round or 50 ft. hewn timber.....	1 ton.
42 cubic feet.....	1 ton of shipping.

CIRCULAR MEASURE.

60 seconds...1 minute	60 degrees...1 quadrant.
60 minutes...1 degree	360 degrees...1 circumference.
60 degrees...1 sign	

MEASURE OF TIME.

60 seconds.....	1 minute.
60 minutes.....	1 hour.
24 hours.....	1 day.
7 days.....	1 week.
28 days.....	1 lunar month.
28, 29, 30, or 31 days.....	1 calendar m'th.
12 calendar months.....	1 year.
365 days.....	1 common year.
366 days.....	1 Leap year.
365½ days.....	1 Julian year.
365 days, 5 hours, 48 minutes, 49 seconds.....	1 solar year.
365 days, 6 hours, 9 minutes, 12 seconds.....	1 sidereal year.

HAY MEASURE.

The ton is sometimes the short and sometimes the long ton.

1 ton.....	2000	1 bale.....	300 lbs.
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When hay sells at \$16 a ton, the bale is worth \$2.40; when \$15, \$2.25; when \$14, \$2.10; when \$13, \$1.95; when \$12, \$1.80; when \$11, \$1.65; when \$10, \$1.50.

YARN MEASURE.

64 inches.....	1 thread	7 skeins..1 hank (560 yards.)
80 threads.....	1 skein.	18 hanks..1 spindle.

QUANTITIES BY NUMBER.

12 articles.....	1 dozen	20 articles...1 score.
13 articles.....	1 long	12 dozen...1 gross.
	or baker's dozen.	

COAL MEASURE.

2000 lbs....1 short ton.	43 cubic ft.1 long ton.
2240 lbs....1 long ton.	29 bushels..1 long ton.
38 cubic ft.1 short ton.	36 bushels..1 chaldron.

PAPER MEASURE.

24 sheets.....	1 quire.	2 reams.....	1 bundle.
20 quires.....	1 ream.	10 reams.....	1 bale.

ROPE MEASURE.

6 feet.....	1 fathom	120 feet.....	1 cable.
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The ropes of all sizes are distinguished by the diameter of the same, for instance, a two inch rope means one two inches in diameter, etc.

The strongest kind of hemp rope is untarred. White, three strand rope, and the next in strength is that which is known as the common three-strand, hawse laid rope, tarred.

Wire rope is more than double the strength of hemp rope of the same thickness.

Splicing a rope is said to weaken it one-eighth.

To find what weight a rope will lift when roven as a tackle:

Multiply the weight that the rope is capable of suspending by the number of parts at the moveable block, and from this subtract one-fourth for resistance. Thus: 8.9 tons, the strength of the rope multiplied by 6, the number