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## $\underline{\text { Rules for Computing Circumference, Areas and Volume }}$

Circumference of Circle: $3.1416 x$ diameter . Area of Circle: $0.7854 x$ diameter $x$ diameter. Area of Rectangle: length $x$ width. Capacity of Rectangular Bin: length $x$ width $x$ depth

## Linear Measurement

| 1 inch $=$ | 2.54 centimeters |  |
| :--- | :--- | :--- |
| 1 foot $=$ | 12 inches | $=30.48$ centimeters |
| 1 yard $=$ | 3 feet | $=0.91$ meters |
| 1 rod $=$ | 5.5 yards |  |
| 16.5 feet |  |  |
|  | 320 rods <br> 1760 yards <br> 5280 feet | $=1609.34$ meters |
| 1 statute mile $=$ |  |  |
| $1 / 8$ statute mile |  |  |
| 1 furlong $=$ |  | $=1852$ meters |
| 1 international nautical mile | $=6076.11549$ feet |  |

## Surveying Measures

7.92 inches $=\quad 1$ link

25 links or
16.5 feet $=\quad 1$ rod, perch or pole

100 links or
4 rods $=$
66 feet $=1$ chain

80 chains or
320 rods $/$ poles $=1 \mathrm{mile}$ 5280 feet

Volume of Cylinder: $0.7854 x$ diameter $x$ diameter $x$ height
Approximate Capacity of Container Having Sloping Sides: Vertical height x one-half the sum of top area and bottom area.

## Area Measurement

| 1 square foot $=$ | 144 square inches |
| :--- | :--- |
| 1 square yard $=$ |  |
| 1 square rod $=$ | 9 square feet |
| 30.25 square yards |  |
| 1 acre $=$ | 160 square rods <br> 4840 square yards $=0.40$ hectare <br> 43560 square feet |
| 1 square mile $=$ <br> 1 section of land $=$ | 640 acres <br> 1 square mile |

## Cubic Measurement

| 1 cubic foot $=$ | 1728 cubic inches $=$28.32 cubic  <br> decimeters  <br>   <br> 1 cubic yard $=$ 27 cubic feet <br>   <br>   <br> meters  |
| :--- | :---: |

## Square Measurement

| $208.708 \times 208.708$ feet $=$ | 1 acre |
| :--- | :--- |
| 43,560 square feet $=$ | 1 acre |
| 16 square rods or poles $=$ | 1 square chain |
| 10 square chains $=$ | 1 acre |
| 160 square rods or poles $=$ | 1 acre |
| 640 acres $($ one section $)=$ | 1 square mile |
| 36 square miles $=$ | 1 township |

