## Ohio's State Tests Reference Sheet High School

1 foot $=12$ inches
1 yard $=3$ feet
1 mile $=1,760$ yards
1 mile $=5,280$ feet
1 mile $\approx 1.609$ kilometers
1 inch $=2.54$ centimeters
1 kilometer $\approx 0.62$ mile
1 meter $\approx 39.37$ inches

1 cup $=8$ fluid ounces
1 pound $=16$ ounces $\quad 1$ pint $=2$ cups
1 pound $\approx 0.454$ kilograms 1 quart $=2$ pints
1 kilogram $\approx 2.2$ pounds 1 gallon $=4$ quarts
1 gallon $\approx 3.785$ liters
1 liter $\approx 0.264$ gallons
1 radian $=\frac{180}{\pi}$ degrees $\quad 1$ liter $=1000$ cubic centimeters

Right Triangle Relationships
$a^{2}+b^{2}=c^{2}$


$$
\begin{aligned}
\sin A & =\frac{a}{c} \\
\cos A & =\frac{b}{c} \\
\tan A & =\frac{a}{b}
\end{aligned}
$$



| Key |  |  |  |
| :---: | :---: | :---: | :---: |
| $b=$ base | $B=$ area of base | $h=$ height | $r=$ radius |


| Triangle | $A=\frac{1}{2} b h$ |
| :---: | :---: |
| Parallelogram | $A=b h$ |
| Circle | $C=2 \pi r$ |
| Circle | $A=\pi r^{2}$ |
| General Prisms | $V=B h$ |
| Cylinder | $V=\pi r^{2} h$ |
| Sphere | $V=\frac{4}{3} \pi r^{3}$ |
| Cone | $V=\frac{1}{3} \pi r^{2} h$ |
| Pyramid | $V=\frac{1}{3} B h$ |

