Ohio State Test Reference Sheet High School

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

1 cup = 8 fluid ounces
1 pound = 16 ounces
1 pound ≈ 0.454 kilograms
1 pint = 2 cups
1 quart = 2 pints
1 kilogram ≈ 2.2 pounds
1 gallon = 4 quarts
1 gallon ≈ 3.785 liters
1 liter ≈ 0.264 gallons
1 liter = 1000 cubic centimeters

<table>
<thead>
<tr>
<th>Trigonometry</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \sin A = \frac{\text{opposite}}{\text{hypotenuse}} )</td>
</tr>
<tr>
<td>( \cos A = \frac{\text{adjacent}}{\text{hypotenuse}} )</td>
</tr>
<tr>
<td>( \tan A = \frac{\text{opposite}}{\text{adjacent}} )</td>
</tr>
<tr>
<td>Key</td>
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<td>----------------------</td>
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<tr>
<td>$b$ = base</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Triangle</th>
<th>$A = \frac{1}{2} bh$</th>
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</thead>
<tbody>
<tr>
<td>Parallelogram</td>
<td>$A = bh$</td>
</tr>
<tr>
<td>Circle</td>
<td>$C = 2 \pi r$</td>
</tr>
<tr>
<td></td>
<td>$A = \pi r^2$</td>
</tr>
<tr>
<td>General Prisms</td>
<td>$V = Bh$</td>
</tr>
<tr>
<td>Cylinder</td>
<td>$V = \pi r^2 h$</td>
</tr>
<tr>
<td>Sphere</td>
<td>$V = \frac{4}{3} \pi r^3$</td>
</tr>
<tr>
<td>Cone</td>
<td>$V = \frac{1}{3} \pi r^2 h$</td>
</tr>
<tr>
<td>Pyramid</td>
<td>$V = \frac{1}{3} Bh$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distance Formula</th>
<th>$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadratic Formula</td>
<td>$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$</td>
</tr>
<tr>
<td>Addition Rule</td>
<td>$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$</td>
</tr>
</tbody>
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