**ISTEP+ Mathematics Reference Sheet**

**Grade 7**

### Formulas

Area of Rectangle = \( lw \)

Area of Triangle = \( \frac{1}{2} bh \)

Area of Parallelogram = \( bh \)

Area of Trapezoid = \( \frac{1}{2} h(b_1 + b_2) \)

Circumference of Circle = \( 2\pi r \) or \( \pi d \)

Area of Circle = \( \pi r^2 \)

Volume of Right Rectangular Prism = \( lwh \) or \( Bh \)

Volume of Right Cylinder = \( \pi r^2 h \)

### Conversions

- 1 foot = 12 inches
- 1 yard = 3 feet
- 1 mile = 5,280 feet
- 1 mile = 1,760 yards
- 1 cup = 8 fluid ounces
- 1 pint = 2 cups
- 1 quart = 2 pints
- 1 gallon = 4 quarts
- 1 pound = 16 ounces
- 1 ton = 2,000 pounds

- 1 meter = 1,000 millimeters
- 1 meter = 100 centimeters
- 1 mile = 1,609 kilometers
- 1 pound = 0.454 kilogram
- 1 gallon = 3.785 liters
- 1 gram = 1,000 milligrams
- 1 kilogram = 1,000 grams
- 1 meter = 39.37 inches
- 1 kilometer = 0.62 mile
- 1 kilogram = 2.2 pounds
- 1 liter = 0.264 gallon