B.E.S.T. Algebra 1 EOC Mathematics Reference Sheet

Customary 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

Metric Conversions

1 meter = 100 centimeters
1 meter = 1000 millimeters
1 kilometer = 1000 meters

1 liter = 1000 milliliters

1 gram = 1000 milligrams
1 kilogram = 1000 grams

Time Conversions

1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours
1 year = 365 days
1 year = 52 weeks

Formulas

Forms of Linear Equations	Forms of Quadratic Functions	Forms of Exponential Functions
$y = mx + b$ $Ax + By = C$ $y - y_1 = m(x - x_1)$	$f(x) = ax^2 + bx + c$ $f(x) = a(x - h)^2 + k$ $f(x) = a(x - p)(x - q)$	$f(x) = ab^x$ $f(x) = a(1 \pm r)^x$

Quadratic Formula
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$ where $ax^2 + bx + c = 0$ and $a \neq 0$

Final Amounts under Simple Interest	Final Amounts under Compound Interest
$$A = P(1 + rt)$$ where P = principal, r = rate, and t = time	$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$ where P = principal, r = rate, n = number of times compounded, and t = time