

Class 8 Maths Formulas

Interest Formulas

- Discount = Marked Price - Sale Price
- Simple Interest = (Principal \times Rate \times Time)/100
- Compound Interest Formula = Amount – Principal

Algebra Formulas

- $(a + b)^2 = a^2 + 2ab + b^2$
- $(a + b)(a - b) = a^2 - b^2$
- $(a - b)^2 = a^2 - 2ab + b^2$

Exponent Formulas

- Law of Product: $a^m \times a^n = a^{m+n}$
- Law of Quotient: $a^m/a^n = a^{m-n}$
- Law of Zero Exponent: $a^0 = 1$
- Law of Negative Exponent: $a^{-m} = 1/a^m$
- Law of Power of a Power: $(a^m)^n = a^{mn}$
- Law of Power of a Product: $(ab)^m = a^m b^m$
- Law of Power of a Quotient: $(a/b)^m = a^m/b^m$

Geometry Formulas

- Curved Surface Area of a Cone = $1/2 \times l \times 2\pi r = \pi rl$, where 'r' is its base radius and 'l' its slant height. $l = \sqrt{r^2 + h^2}$
- Volume of a Cuboid = Base Area \times Height = Length \times Breadth \times Height
- Volume of a Cone = $(1/3) \pi r^2 h$
- Volume of a Sphere = $(4/3) \pi r^3$
- Volume of a Hemisphere = $(2/3) \pi r^3$

Rational Number Formulas

- Additive Identity states $(a/b + 0) = (a/b)$
- Multiplicative Identity states $(a/b) \times 1 = (a/b)$
- Multiplicative Inverse states $(a/b) \times (b/a) = 1$

