TEAS REVIEW

TEAS Cheat Sheet

MATHEMATICS

Numbers & Algebra

$$\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d}$$

$$\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\frac{a}{c} - \frac{b}{c} = \frac{a-b}{c}$$

$$a\frac{b}{c} = \frac{a \times c + b}{c}$$

Slope line

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Linear Equation

$$y = mx + b$$

Exponential Function

$$y = a \times b^x$$

Point-slope intercept

$$y - y_1 = m(x - x_1)$$

Logarithmic Function

$$y = \log_b(x)$$

Quadratic Equation

$$ax^2 + bx + c = 0$$

Factorization

$$x^2 - a^2 = (x + a)(x - a)$$

Measurement & Data

Circumference of a circle

$$C = 2\pi r$$

Area of a Square

$$A = s^2$$

Area of a triangle

$$A = \frac{1}{2}b \times h$$

Area of a Trapezoid

$$A = \frac{1}{2}(b_1 + b_2)h$$

Volume of a Rectangular Prism

$$V = l \times w \times h$$

Volume of a Cylinder

$$V = \pi r^2 h$$

Volume of a Cone

$$V = \frac{1}{3}\pi r^2 h$$

pH

$$\text{pH} = -\log[H^+]$$

Coefficient of Variation

$$CV = \left(\frac{s}{\bar{x}}\right) \times 100\,\%$$

Standard Deviation

$$\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(x_i - \mu)^2}$$

Variance

$$\sigma^2 = \frac{1}{N}\sum_{i=1}^{N}(x_i - \mu)^2$$

Language for interpreting graphs and charts:

- To go up: increase, rise, rocket, climb, lift, grow, go up, jump, surge.
- To go down: decline, fall, go down, slump, plummet.
- No change: remain stable/constant/steady at.
- Change of direction: evel out/off, stand at, stop falling/rising.
- Frequent change: fluctuate, fluctuation.

Converting Decimals to Fractions

1. Write down the decimal divided by 1.
2. Multiply both top and bottom by 10 for every number after the decimal point. (Eg. If there are two numbers after the decimal point, use 100, if there are three, use 1000, etc.).
3. Reduce the fraction.