

# Formulas that must be MEMORIZED

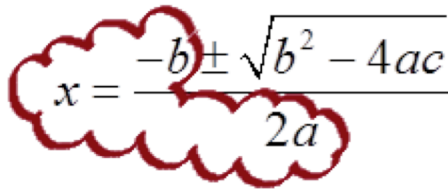
- Simple Interest Formula “yart” :

$$y = A(1 \pm r)^t$$

- Slope formula (Average rate of change):

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

- Axis of symmetry: (look at quadratic formula on reference sheet!)


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

- Interquartile Range:

$$IQR = Q_3 - Q_1$$

- Recursive Formula for Arithmetic Sequence:

$$a_1 = 1^{st} \#$$

$$a_n = a_{n-1} + d$$

- Common difference:

$$d = a_2 - a_1$$

- Linear Graph

- Recursive Formula for Geometric Sequence:

$$a_1 = 1^{st} \#$$

$$a_n = r \cdot a_{n-1}$$

- Common ratio:

$$r = a_2 \div a_1$$

- Exponential graph

- Distance = Rate · Time