# College Algebra Important Formulas & Facts

## Linear Functions & Relations Slope-intercept form y = f(x) = mx + b

 Standard form Ax + By = C

 Point-slope form 

 Slope formula: 

Standard Equation of a Circle (x – h)2 + (y – k)2 = r2  Center (h, k); radius r

Distance Formula from P1 (x1, y1) to P2 (x2, y2)

 

Quadratic Functions Standard form 

 Vertex form 

The Quadratic Formula The solutions of ax2 + bx + c = 0 , a ≠ 0 are given by

 

Compound Interest Formulas: Continuous Compounding

  $A=Pe^{rt}$

 $APY=(1+\frac{r}{n})^{n}-1$ $APY=e^{r}-1$

A = accumulated amount, P = Principle, r = annual interest rate, t = number of years,

n = frequency of compounding per year.

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| **Laws of Exponents** |
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| **Properties for Logarithms** |
| 1.  | 4.  |
| 2.  | 5.  |
| 3.  | 6. $log\_{a}M=\frac{log\_{b}M}{log\_{b}a}$ |

**Do your best! Rise to the challenge! Live and learn!**