# Florida Advanced Course Test (FACT) College Algebra Reference Sheet

## **Formulas**

## **Forms of Linear Equations**

$$y = mx + b$$

$$Ax + By = C$$

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

#### **Forms of Quadratic Functions**

$$f(x) = ax^2 + bx + c$$

$$f(x) = a(x-h)^2 + k$$

$$f(x) = a(x-p)(x-q)$$

## **Forms of Exponential Functions**

$$f(x) = ab^x$$

$$f(x) = a(1 \pm r)^x$$

### **Quadratic Formula**

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

where  $ax^2 + bx + c = 0$  and  $a \neq 0$ 

#### **Interest Formulas**

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$A = Pe^{rt}$$

$$I = Prt$$