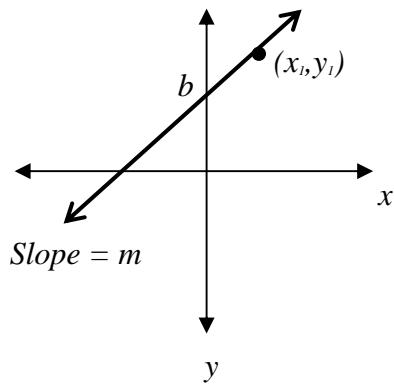
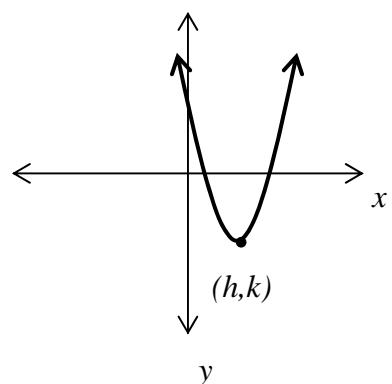


## Common Graphs

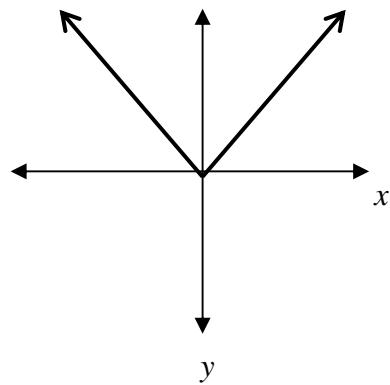
1. **Line:**  $y = mx + b$  or  $y - y_1 = m(x - x_1)$



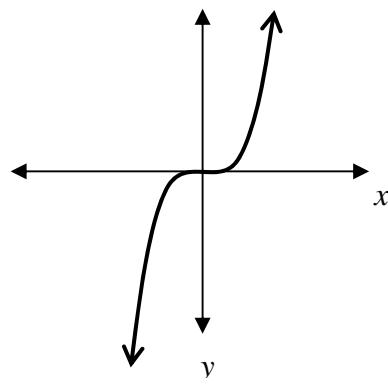
2. **Parabola:**  $y = a(x - h)^2 + k$



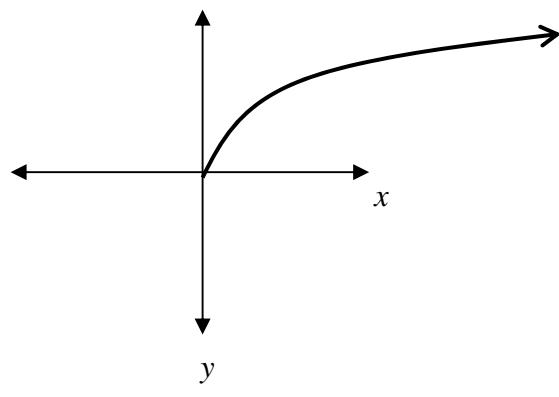
3. **Absolute Value:**  $y = |x|$



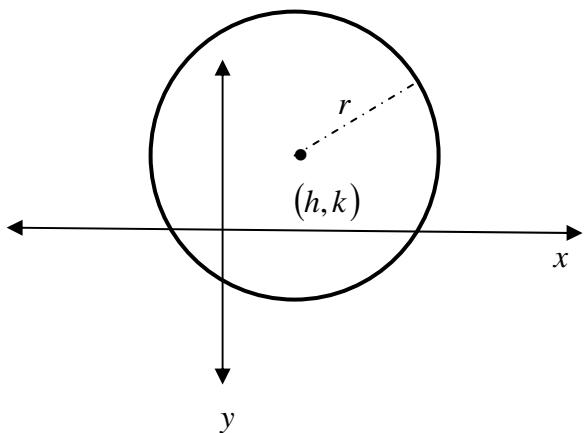
4. **Cubic:**  $y = x^3$



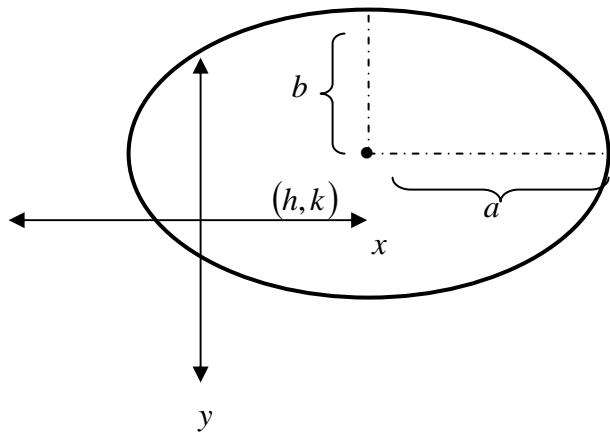
5. **Square Root:**  $y = \sqrt{x}$



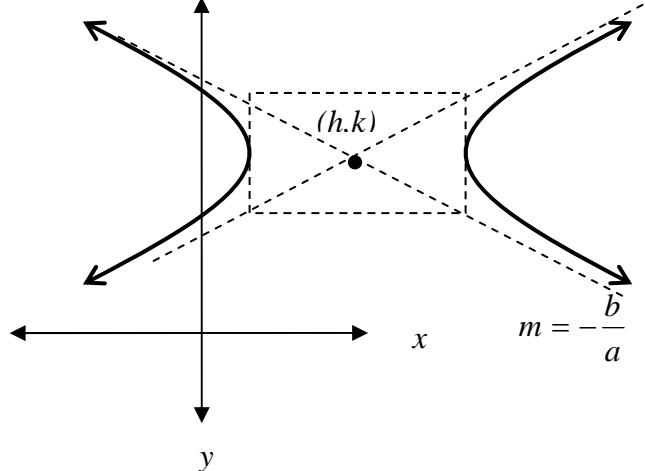
6. **Circle:**  $(x - h)^2 + (y - k)^2 = r^2$



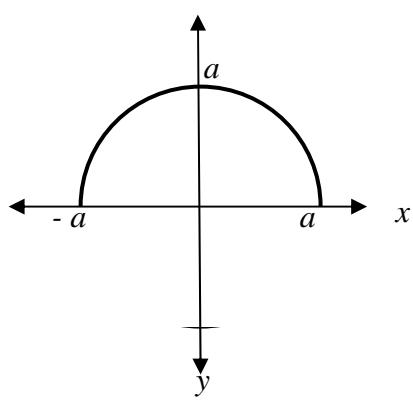
7. **Ellipse:**  $\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$



8. **Hyperbola:**  $\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$        $m = \frac{b}{a}$

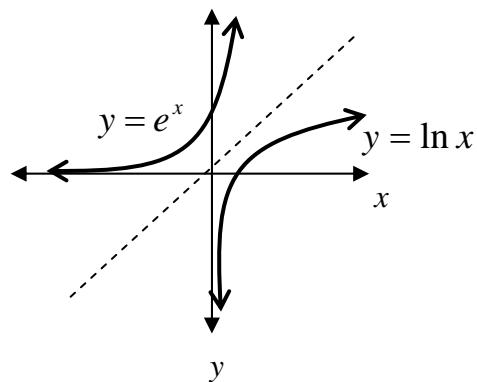


9. **Semi-circle:**  $y = \sqrt{a^2 - x^2}$

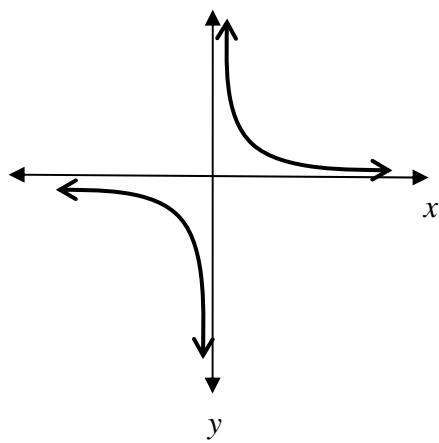


10. **Exponential:**  $y = e^x$

**Logarithmic:**  $y = \ln x$



11. **Reciprocal:**  $y = \frac{1}{x}$



12. **Greatest Integer:**  $y = \|x\|$

