

Math 136 Formula Sheet for Exams. No other document may be used for the exams. Nothing can be added to (or written on) the formula sheet.

$$A^3 + B^3 = (A + B)(A^2 - AB + B^2)$$

$$A^3 - B^3 = (A - B)(A^2 + AB + B^2)$$

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

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

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

$$\left( -\frac{b}{2a}, f\left(-\frac{b}{2a}\right) \right)$$

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

$$A = Pe^{rt}$$

$$A(t) = A_0 e^{rt}$$

$$\log_a uv = \log_a u + \log_a v$$

$$\log_a \frac{u}{v} = \log_a u - \log_a v$$

$$\log_a u^n = n \log_a u$$

$$\log_a x = \frac{\log_b x}{\log_b a}$$