

The following reference formulas may be used during the Math 1050 final exam.
Students are NOT allowed to use any additional books or notes.

$$(x-h)^2 + (y-k)^2 = r^2$$

$$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$$

$$\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$$

$$\frac{(x-h)^2}{b^2} + \frac{(y-k)^2}{a^2} = 1$$

$$\frac{(y-k)^2}{a^2} - \frac{(x-h)^2}{b^2} = 1$$

$$(y-k)^2 = 4a(x-h)$$

$$(x-h)^2 = 4a(y-k)$$

$$(y-k)^2 = -4a(x-h)$$

$$(x-h)^2 = -4a(y-k)$$

$$A = Pe^{rt}$$

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

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

$$S_n = \frac{n}{2}(a_1 + a_n)$$

$$S_n = a_1 \frac{1-r^n}{1-r}, r \neq 0, 1$$