

010001100

17 29

4.56 4.56 4 5 4 5 4.56 4.56  $\pi e e i i \gamma \infty$

22 7  $\pi$

$a_1 a_2 \dots a_n a_1 a_2 \dots a_n : a_1 a_2 \dots a_n x_1 x_2 \dots x_n = b_1 b_2 \dots b_n$

$f(x) = \sum_{j=0}^{\infty} f_j \frac{x^j}{j!}$

$x^2 - 9 = (x - 3)(x + 3)$

$x^2 - 9 = (x - 3)^2$

$ax^2 + bx + c = 0$   
 $ax^2 + bx = -c$   
 Divide out leading coefficient.  $x^2 + \frac{b}{a}x + \frac{c}{a} = 0$   
 $x^2 + \frac{b}{a}x = -\frac{c}{a}$   
 Complete the square.  $(x + \frac{b}{2a})^2 = \frac{b^2}{4a^2} - \frac{c}{a}$   
 Discriminant revealed.  $(x + \frac{b}{2a})^2 = \frac{b^2 - 4ac}{4a^2}$   
 $x + \frac{b}{2a} = \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$   
 There's the vertex formula.  $x = -\frac{b}{2a} \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$