

Unknown node type: matrix

Unknown node type: apply

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$$\left(egin{array}{cccc} a_{11} & a_{12} & \dots & a_{1n} \ a_{21} & a_{22} & \dots & a_{2n} \ & & dots & & \ a_{m1} & a_{m2} & \dots & a_{mn} \end{array}
ight) \left(egin{array}{c} x_1 \ x_2 \ dots \ x_n \end{array}
ight) = \left(egin{array}{c} b_1 \ b_2 \ dots \ b_n \end{array}
ight)$$

$$\mathrm{f}\left(x
ight) = \sum_{j=0}^{\infty} \; rac{\mathrm{f}^{\left(j
ight)}\left( heta
ight)}{j!} x^{j}$$

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

$$x^2-9=x^2-igsqcup^2$$

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