*>> syms x a b c d*

*>> solve('a\*x^3+b\*x^2+c\*x+d=0')*

*ans =*

*(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3) - b/(3\*a) - (c/(3\*a) - b^2/(9\*a^2))/(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3)*

*(c/(3\*a) - b^2/(9\*a^2))/(2\*(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3)) - b/(3\*a) - (((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3)/2 - (3^(1/2)\*((c/(3\*a) - b^2/(9\*a^2))/(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3) + (((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3))\*i)/2*

*(c/(3\*a) - b^2/(9\*a^2))/(2\*(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3)) - b/(3\*a) - (((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3)/2 + (3^(1/2)\*((c/(3\*a) - b^2/(9\*a^2))/(((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3) + (((d/(2\*a) + b^3/(27\*a^3) - (b\*c)/(6\*a^2))^2 + (c/(3\*a) - b^2/(9\*a^2))^3)^(1/2) - b^3/(27\*a^3) - d/(2\*a) + (b\*c)/(6\*a^2))^(1/3))\*i)/2*