y1=(A(i)\*((-A(i)^2+2\*A(i)\*a(i)-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+A(i)^2\*B(i)-B(i)\*R^2-a(i)\*((-A(i)^2+2\*A(i)\*a(i)-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+B(i)\*a(i)^2+A(i)^2\*b(i)-B(i)\*b(i)^2-B(i)^2\*b(i)+B(i)\*r^2+R^2\*b(i)+a(i)^2\*b(i)-b(i)\*r^2+B(i)^3+b(i)^3-2\*A(i)\*B(i)\*a(i)-2\*A(i)\*a(i)\*b(i))/(2\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)+a(i)^2+b(i)^2))

y2=(A(i)^2\*B(i)-A(i)\*((-A(i)^2+2\*A(i)\*a(i)-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-B(i)\*R^2+a(i)\*((-A(i)^2+2\*A(i)\*a(i)-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+B(i)\*a(i)^2+A(i)^2\*b(i)-B(i)\*b(i)^2-B(i)^2\*b(i)+B(i)\*r^2+R^2\*b(i)+a(i)^2\*b(i)-b(i)\*r^2+B(i)^3+b(i)^3-2\*A(i)\*B(i)\*a(i)-2\*A(i)\*a(i)\*b(i))/(2\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)+a(i)^2+b(i)^2))

x1=a(i)+(6\*B(i)\*b(i)^5-6\*A(i)^5\*a(i)-6\*A(i)\*a(i)^5+6\*B(i)^5\*b(i)+A(i)^6-A(i)^2\*B(i)^4+A(i)^4\*B(i)^2-B(i)^6+A(i)^2\*R^4-2\*A(i)^4\*R^2-B(i)^2\*R^4+2\*B(i)^4\*R^2+15\*A(i)^2\*a(i)^4-20\*A(i)^3\*a(i)^3+15\*A(i)^4\*a(i)^2+a(i)^6-A(i)^2\*b(i)^4+A(i)^4\*b(i)^2+B(i)^2\*a(i)^4-B(i)^4\*a(i)^2-b(i)^6-15\*B(i)^2\*b(i)^4+20\*B(i)^3\*b(i)^3-15\*B(i)^4\*b(i)^2+A(i)^2\*r^4+2\*A(i)^4\*r^2-2\*R^2\*a(i)^4+R^4\*a(i)^2-B(i)^2\*r^4+2\*B(i)^4\*r^2+2\*R^2\*b(i)^4-R^4\*b(i)^2-a(i)^2\*b(i)^4+a(i)^4\*b(i)^2+a(i)^2\*r^4+2\*a(i)^4\*r^2-b(i)^2\*r^4+2\*b(i)^4\*r^2-4\*A(i)\*B(i)^2\*a(i)^3-4\*A(i)^3\*B(i)^2\*a(i)+4\*A(i)^2\*B(i)\*b(i)^3+4\*A(i)^2\*B(i)^3\*b(i)+8\*A(i)\*R^2\*a(i)^3+8\*A(i)^3\*R^2\*a(i)-8\*B(i)\*R^2\*b(i)^3-8\*B(i)^3\*R^2\*b(i)-2\*a(i)\*b(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*a(i)^3\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-4\*A(i)\*a(i)^3\*b(i)^2-4\*A(i)^3\*a(i)\*b(i)^2+4\*B(i)\*a(i)^2\*b(i)^3+4\*B(i)^3\*a(i)^2\*b(i)-8\*A(i)\*a(i)^3\*r^2-8\*A(i)^3\*a(i)\*r^2-8\*B(i)\*b(i)^3\*r^2-8\*B(i)^3\*b(i)\*r^2+6\*A(i)^2\*B(i)^2\*a(i)^2-6\*A(i)^2\*B(i)^2\*b(i)^2-12\*A(i)^2\*R^2\*a(i)^2+4\*A(i)^2\*B(i)^2\*r^2+12\*B(i)^2\*R^2\*b(i)^2+6\*A(i)^2\*a(i)^2\*b(i)^2-2\*A(i)^2\*R^2\*r^2-6\*B(i)^2\*a(i)^2\*b(i)^2+2\*B(i)^2\*R^2\*r^2+12\*A(i)^2\*a(i)^2\*r^2+4\*A(i)^2\*b(i)^2\*r^2+4\*B(i)^2\*a(i)^2\*r^2+12\*B(i)^2\*b(i)^2\*r^2-2\*R^2\*a(i)^2\*r^2+2\*A(i)\*B(i)^4\*a(i)+2\*R^2\*b(i)^2\*r^2-2\*A(i)^4\*B(i)\*b(i)+4\*a(i)^2\*b(i)^2\*r^2-2\*A(i)\*R^4\*a(i)+2\*B(i)\*R^4\*b(i)+2\*A(i)\*a(i)\*b(i)^4-2\*B(i)\*a(i)^4\*b(i)-2\*A(i)\*a(i)\*r^4+2\*B(i)\*b(i)\*r^4-2\*A(i)\*B(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)^3\*B(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*A(i)\*b(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)\*a(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*A(i)^3\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)^3\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*B(i)\*a(i)\*b(i)^3+8\*A(i)\*B(i)\*a(i)^3\*b(i)-8\*A(i)\*B(i)^3\*a(i)\*b(i)+8\*A(i)^3\*B(i)\*a(i)\*b(i)+2\*A(i)\*B(i)\*R^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)\*B(i)\*a(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)^2\*B(i)\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)\*B(i)\*b(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)\*B(i)^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)\*B(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)\*R^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*B(i)\*R^2\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)\*a(i)^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*B(i)\*a(i)\*b(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*B(i)^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+12\*A(i)\*B(i)^2\*a(i)\*b(i)^2-12\*A(i)^2\*B(i)\*a(i)^2\*b(i)+2\*A(i)\*b(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)\*a(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*R^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*B(i)^2\*a(i)\*r^2-8\*A(i)^2\*B(i)\*b(i)\*r^2+4\*A(i)\*R^2\*a(i)\*r^2-4\*B(i)\*R^2\*b(i)\*r^2-2\*a(i)\*b(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*a(i)\*b(i)^2\*r^2-8\*B(i)\*a(i)^2\*b(i)\*r^2+16\*A(i)\*B(i)\*a(i)\*b(i)\*r^2)^(1/2)/(2\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)+a(i)^2+b(i)^2))

x2=a(i)-(6\*B(i)\*b(i)^5-6\*A(i)^5\*a(i)-6\*A(i)\*a(i)^5+6\*B(i)^5\*b(i)+A(i)^6-A(i)^2\*B(i)^4+A(i)^4\*B(i)^2-B(i)^6+A(i)^2\*R^4-2\*A(i)^4\*R^2-B(i)^2\*R^4+2\*B(i)^4\*R^2+15\*A(i)^2\*a(i)^4-20\*A(i)^3\*a(i)^3+15\*A(i)^4\*a(i)^2+a(i)^6-A(i)^2\*b(i)^4+A(i)^4\*b(i)^2+B(i)^2\*a(i)^4-B(i)^4\*a(i)^2-b(i)^6-15\*B(i)^2\*b(i)^4+20\*B(i)^3\*b(i)^3-15\*B(i)^4\*b(i)^2+A(i)^2\*r^4+2\*A(i)^4\*r^2-2\*R^2\*a(i)^4+R^4\*a(i)^2-B(i)^2\*r^4+2\*B(i)^4\*r^2+2\*R^2\*b(i)^4-R^4\*b(i)^2-a(i)^2\*b(i)^4+a(i)^4\*b(i)^2+a(i)^2\*r^4+2\*a(i)^4\*r^2-b(i)^2\*r^4+2\*b(i)^4\*r^2-4\*A(i)\*B(i)^2\*a(i)^3-4\*A(i)^3\*B(i)^2\*a(i)+4\*A(i)^2\*B(i)\*b(i)^3+4\*A(i)^2\*B(i)^3\*b(i)+8\*A(i)\*R^2\*a(i)^3+8\*A(i)^3\*R^2\*a(i)-8\*B(i)\*R^2\*b(i)^3-8\*B(i)^3\*R^2\*b(i)-2\*a(i)\*b(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*a(i)^3\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-4\*A(i)\*a(i)^3\*b(i)^2-4\*A(i)^3\*a(i)\*b(i)^2+4\*B(i)\*a(i)^2\*b(i)^3+4\*B(i)^3\*a(i)^2\*b(i)-8\*A(i)\*a(i)^3\*r^2-8\*A(i)^3\*a(i)\*r^2-8\*B(i)\*b(i)^3\*r^2-8\*B(i)^3\*b(i)\*r^2+6\*A(i)^2\*B(i)^2\*a(i)^2-6\*A(i)^2\*B(i)^2\*b(i)^2-12\*A(i)^2\*R^2\*a(i)^2+4\*A(i)^2\*B(i)^2\*r^2+12\*B(i)^2\*R^2\*b(i)^2+6\*A(i)^2\*a(i)^2\*b(i)^2-2\*A(i)^2\*R^2\*r^2-6\*B(i)^2\*a(i)^2\*b(i)^2+2\*B(i)^2\*R^2\*r^2+12\*A(i)^2\*a(i)^2\*r^2+4\*A(i)^2\*b(i)^2\*r^2+4\*B(i)^2\*a(i)^2\*r^2+12\*B(i)^2\*b(i)^2\*r^2-2\*R^2\*a(i)^2\*r^2+2\*A(i)\*B(i)^4\*a(i)+2\*R^2\*b(i)^2\*r^2-2\*A(i)^4\*B(i)\*b(i)+4\*a(i)^2\*b(i)^2\*r^2-2\*A(i)\*R^4\*a(i)+2\*B(i)\*R^4\*b(i)+2\*A(i)\*a(i)\*b(i)^4-2\*B(i)\*a(i)^4\*b(i)-2\*A(i)\*a(i)\*r^4+2\*B(i)\*b(i)\*r^4-2\*A(i)\*B(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)^3\*B(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*A(i)\*b(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)\*a(i)^3\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*A(i)^3\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)^3\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*B(i)\*a(i)\*b(i)^3+8\*A(i)\*B(i)\*a(i)^3\*b(i)-8\*A(i)\*B(i)^3\*a(i)\*b(i)+8\*A(i)^3\*B(i)\*a(i)\*b(i)+2\*A(i)\*B(i)\*R^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)\*B(i)\*a(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)^2\*B(i)\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)\*B(i)\*b(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)\*B(i)^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)\*B(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*A(i)\*R^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-2\*B(i)\*R^2\*a(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*A(i)\*a(i)^2\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*A(i)^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+6\*B(i)\*a(i)\*b(i)^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-6\*B(i)^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+12\*A(i)\*B(i)^2\*a(i)\*b(i)^2-12\*A(i)^2\*B(i)\*a(i)^2\*b(i)+2\*A(i)\*b(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*B(i)\*a(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)+2\*R^2\*a(i)\*b(i)\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*B(i)^2\*a(i)\*r^2-8\*A(i)^2\*B(i)\*b(i)\*r^2+4\*A(i)\*R^2\*a(i)\*r^2-4\*B(i)\*R^2\*b(i)\*r^2-2\*a(i)\*b(i)\*r^2\*((2\*A(i)\*a(i)-A(i)^2-B(i)^2+2\*B(i)\*b(i)+R^2+2\*R\*r-a(i)^2-b(i)^2+r^2)\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)-R^2+2\*R\*r+a(i)^2+b(i)^2-r^2))^(1/2)-8\*A(i)\*a(i)\*b(i)^2\*r^2-8\*B(i)\*a(i)^2\*b(i)\*r^2+16\*A(i)\*B(i)\*a(i)\*b(i)\*r^2)^(1/2)/(2\*(A(i)^2-2\*A(i)\*a(i)+B(i)^2-2\*B(i)\*b(i)+a(i)^2+b(i)^2))