In[184]:=
```
f[x_, y_] := 5 y - x^3;
g[x_, y_] := 5 x + 3 y^3;
ω = 5;


a =
 (D[f[x, y], x, x, x] + D[f[x, y], x, y, y] + D[g[x, y], x, x, y] + D[g[x, y], y, y, y] +
    1 / ω * (D[f[x, y], x, y] * (D[f[x, y], x, x] + D[f[x, y], y, y]) -
       D[g[x, y], x, y] * (D[g[x, y], x, x] + D[g[x, y], y, y]) -
       D[f[x, y], x, x] * D[g[x, y], x, x] + D[f[x, y], y, y] * D[g[x, y], y, y])) / 16


f[x_, y_] := μx + y - x^2;
g[x_, y_] := -x + μy + 2 x^2;
ω = -1;

a =
 (D[f[x, y], x, x, x] + D[f[x, y], x, y, y] + D[g[x, y], x, x, y] + D[g[x, y], y, y, y] +
    1 / ω * (D[f[x, y], x, y] * (D[f[x, y], x, x] + D[f[x, y], y, y]) -
       D[g[x, y], x, y] * (D[g[x, y], x, x] + D[g[x, y], y, y]) -
       D[f[x, y], x, x] * D[g[x, y], x, x] + D[f[x, y], y, y] * D[g[x, y], y, y])) / 16
```

Out[187]= $\frac{3}{4}$

Out[191]= $-\frac{1}{2}$