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In[163]:= ClearAll;
DD = 0.1;
NN = 10;
SS1[x_] := N[Sin[x], 15];
SS2[x_] := If[Sin[x] < 0, -1, 1];
TT1[x_, n_] := N[2.5 * Abs[Round[ $\frac{n * x}{\pi}$ ] -  $\left(\frac{n * x}{\pi}\right)$ ], 15];

TT3[x_, n_] := TT1[x, n] * SS2[x]
TT4[x_, n_] := If[Abs[SS1[x]] > TT1[x, n], 1.25 * SS2[x], 0]
LS1[xx_, yy_, nn_] := Table[{x, SS1[x]}, {x, xx, yy, DD}];
LT3[xx_, yy_, nn_] := Table[{x, TT3[x, nn]}, {x, xx, yy, DD}];
LT4[xx_, yy_, nn_] := Table[{x, TT4[x, nn]}, {x, xx, yy, DD * 0.1}];
AA1[xx_, nn_, dd_] := Sum[TT4[yy, nn] * dd, {yy, 0, xx, dd}];
LA1[xx_, yy_, nn_] := Table[{x, AA1[x, nn, DD * 0.1]}, {x, xx, yy, DD}];
aaaa3 = ListPlot[
{
  LS1[0, 5  $\pi$ , NN],
  LT3[0, 5  $\pi$ , NN],
  LT4[0, 5  $\pi$ , NN]
}, PlotLegends -> "Expressions", Joined -> True, PlotStyle -> {Green, Red, Blue}];
aaaa4 = ListPlot[
{
  LA1[0, 5  $\pi$ , NN]
}, PlotLegends -> "Expressions", Joined -> False, PlotStyle -> {Black}];
Show[{aaaa4}]
Show[{aaaa3}]
Show[{aaaa3, aaaa4}]

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