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In[16]:= SS[offset_, length_, high_] := Table[
    {x, high * Sin[x *  $\pi$  + offset *  $\pi$ ]},
    {x, 0, length, 0.03}];
A1 = SS[0, 3, 1];
AAA = Plot[Sin[x], {x, 0, 2.1  $\pi$ },
    GridLines -> {{
        { $\frac{1}{6} \pi$ , Green},
        { $\frac{2}{6} \pi$ , Green},
        { $\frac{3}{6} \pi$ , Green},
        { $\frac{4}{6} \pi$ , Green},
        { $\frac{5}{6} \pi$ , Green},
        { $\frac{7}{6} \pi$ , Green},
        { $\frac{8}{6} \pi$ , Green},
        { $\frac{9}{6} \pi$ , Green},
        { $\frac{10}{6} \pi$ , Green},
        { $\frac{11}{6} \pi$ , Green},
        {1  $\pi$ , Red},
        {2  $\pi$ , Red},
        {3  $\pi$ , Red}
    }, None}

];
TC[x_, offset_] := If[(x + offset) > 24,
    (x + offset) - 24,
    If[(x + offset) > 12,
        (x + offset) - 12, (x + offset)]];
TS[abc_, x_, offset_] := abc <> ToString[TC[x, offset]];
TT[abc_, offs_, high_] :=
    Table[Graphics[Text[TS[abc, x, offs], {(x - 0.5) / 6 *  $\pi$ , high}]], {x, 1, 12}];
CCa = TT["A", 0, -1.1];
CCb = TT["B", 8, -1.2];
CCc = TT["C", 16, -1.3];
Show[AAA, CCa, CCb, CCc
    , PlotRange -> All
]
ClearAll;

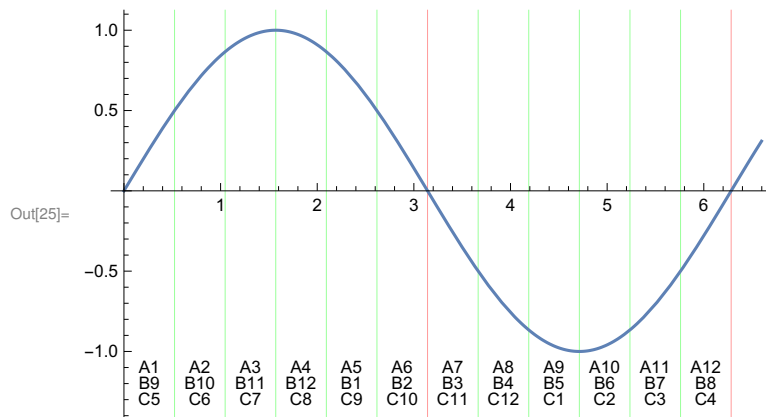
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II3[yy2_] := Integrate[Sin[x], {x, 0, yy2}];
II4[yy2_] := Integrate[Sin[x], {x, yy2 -  $\frac{\pi}{6}$ , yy2}];
II9 = Table[{
  yy,
  II3[yy],
  Round[1000 * II3[yy]] / 1000.0,
  Round[1000 * II4[yy]] / 1000.0,
  Round[II3[yy] * (2 ^ 8)],
  Round[II3[yy] * (2 ^ 10)],
  Round[II3[yy] * (2 ^ 12)],
  Round[II3[yy] * (2 ^ 16)],
  Round[II4[yy] * (2 ^ 16)]

}, {yy,  $\frac{1}{6} \pi$ , 2  $\pi$ ,  $\frac{1}{6} \pi$ }]];
II9 // MatrixForm

```



Out[30]//MatrixForm=

$$\begin{pmatrix} \frac{\pi}{6} & 1 - \frac{\sqrt{3}}{2} & 0.134 & 0.134 & 34 & 137 & 549 & 8780 & 8780 \\ \frac{\pi}{3} & \frac{1}{2} & 0.5 & 0.366 & 128 & 512 & 2048 & 32768 & 23988 \\ \frac{\pi}{2} & 1 & 1. & 0.5 & 256 & 1024 & 4096 & 65536 & 32768 \\ \frac{2\pi}{3} & \frac{3}{2} & 1.5 & 0.5 & 384 & 1536 & 6144 & 98304 & 32768 \\ \frac{5\pi}{6} & \frac{1}{2} (2 + \sqrt{3}) & 1.866 & 0.366 & 478 & 1911 & 7643 & 122292 & 23988 \\ \pi & 2 & 2. & 0.134 & 512 & 2048 & 8192 & 131072 & 8780 \\ \frac{7\pi}{6} & \frac{1}{2} (2 + \sqrt{3}) & 1.866 & -0.134 & 478 & 1911 & 7643 & 122292 & -8780 \\ \frac{4\pi}{3} & \frac{3}{2} & 1.5 & -0.366 & 384 & 1536 & 6144 & 98304 & -23988 \\ \frac{3\pi}{2} & 1 & 1. & -0.5 & 256 & 1024 & 4096 & 65536 & -32768 \\ \frac{5\pi}{3} & \frac{1}{2} & 0.5 & -0.5 & 128 & 512 & 2048 & 32768 & -32768 \\ \frac{11\pi}{6} & 1 - \frac{\sqrt{3}}{2} & 0.134 & -0.366 & 34 & 137 & 549 & 8780 & -23988 \\ 2\pi & 0 & 0. & -0.134 & 0 & 0 & 0 & 0 & -8780 \end{pmatrix}$$