In[33]:= ```
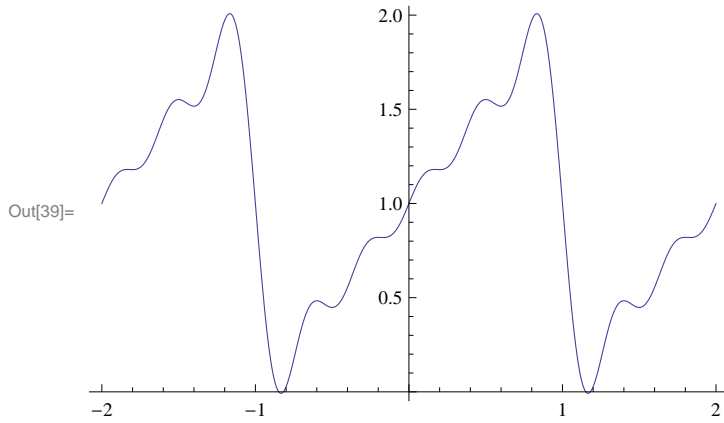n = 5;
L = 2;
a_0 = 2;
a_n = 0;
b_n = (-1)^(i+1) * 2 / i / Pi;
F = a_0 / 2 + Sum[a_n * Cos[2 * Pi * i * x / L], {i, n}] + Sum[b_n * Sin[2 * Pi * i * x / L], {i, n}];
Plot[F, {x, -2, 2}]
```

Out[39]=



In[40]:= ```
n = 50;
L = 2;
a_0 = 2;
a_n = 0;
b_n = (-1)^(i+1) * 2 / i / Pi;
F = a_0 / 2 + Sum[a_n * Cos[2 * Pi * i * x / L], {i, n}] + Sum[b_n * Sin[2 * Pi * i * x / L], {i, n}];
Plot[F, {x, -2, 2}]
```
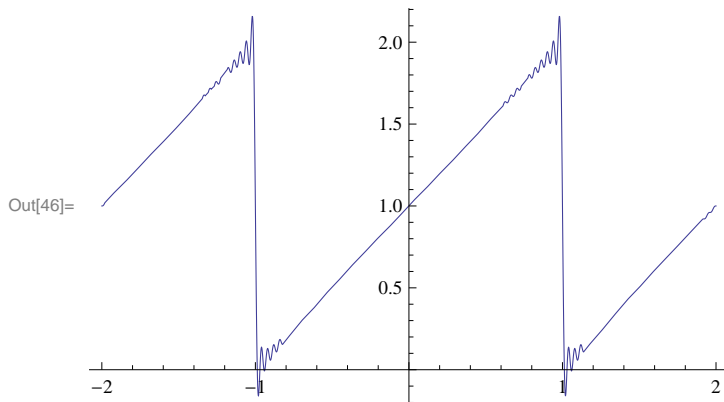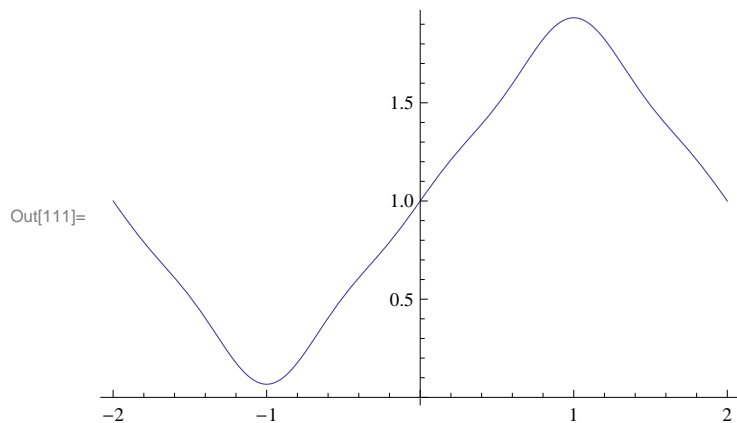
Out[46]=

In[105]:=
```
n = 5;
L = 4;
a₀ = 2;
aₙ = 0;
bₙ = 8 / i² / (Pi)² * (Sin[i * Pi / 2])³;
F = a₀ / 2 + Sum[aₙ * Cos[2 * Pi * i * x / L], {i, n}] + Sum[bₙ * Sin[2 * Pi * i * x / L], {i, n}];
Plot[F, {x, -2, 2}]
```

Out[111]=

In[98]:=
```
n = 50;
L = 4;
a₀ = 2;
aₙ = 0;
bₙ = 8 / i² / (Pi)² * (Sin[i * Pi / 2])³;
F = a₀ / 2 + Sum[aₙ * Cos[2 * Pi * i * x / L], {i, n}] + Sum[bₙ * Sin[2 * Pi * i * x / L], {i, n}];
Plot[F, {x, -2, 2}]
```

Out[104]=