In[4]:=
```
xPoints =
 Flatten @ Values[
   NSolve[D[Sin[4 x^2], x] == 0 && -Pi / 2 ≤ x ≤ Pi / 2,
    x
   ]
  ]
```

Out[4]= {-1.40125, -1.0854, -0.626657, 0., 0.626657, 1.0854, 1.40125}

In[5]:=
```
Plot[
 Sin[4 x^2],
 {x, -Pi / 2, Pi / 2},
 PlotStyle → Black,
 Ticks → None,
 Epilog → {
   PointSize@0.02,
   Table[
    Point[
     {xPoints[[n]], Sin[4 x^2] /. x → xPoints[[n]]}
    ],
    {n, 1, Length[xPoints]}
   ]
  }
]
```

Out[5]=