```
F[x_] = x - 1 / 3 Cos[x];
a = 0;
b = 1;
Do[p[n] = (a + b) / 2.;
 If[Abs[F[p[n]]] ≤ .001, {Print[F[p[n]]]; Print[n]; Break[]},
  If[F[a] * F[p[n]] < 0, b = p[n], a = p[n]]], {n, 1, 10}]
```

-0.000380337

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