In[ ]:=
```
(*This is the correction to Writeup 03_22 in which we replace pi_h
 (g\setminus i=2) with phi_1 instead of (v-\lambda)/2. The partial is still zero,
so only M_2 changes. The assumption is also that s_1^*=1.*)
Solve[
 1/2 (-2/(3 λ + ϕ1 - ϕ2)) (1/(6 λ) (-ϕ2^2 + ϕ1 (3 λ - ϕ1) + ϕ2 (3 λ + 2 ϕ1)) - ϕ1) + (1/2) (1/2 + (ϕ1 - ϕ2)/(3 λ) - 1) == 0, ϕ2]

{{ϕ2 → 1/4 (-3 λ + 4 ϕ1)}}

(*Something of a "guess that... phi_2=phi_1-3/4\lambda solution" then the derivative
 is etcetcetcetc" (plug in some guess for \partial\phi_1/\partial\phi_2)*)
```