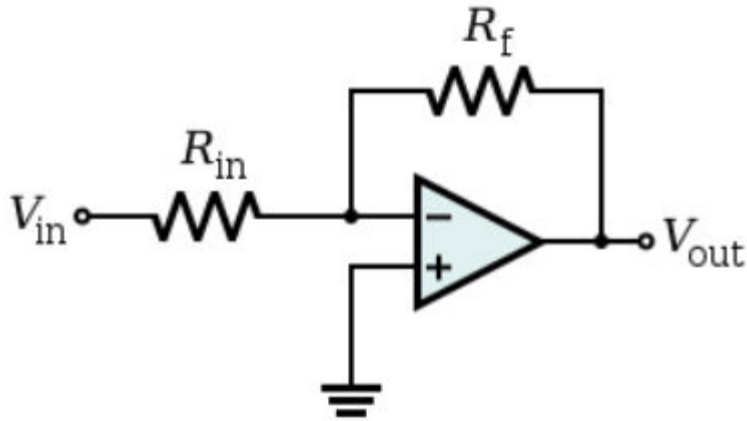


Problem 2.3.1



Given the above circuit, where:

- $R_{in} = 2k\Omega$
- $G = -40$

what is the appropriate value that should be chosen for resistor R_f ?

While

$$v_o = -\frac{R_f}{R_1} \times V_{in}$$

Therefore

```
syms Rf
Rin = 2e3;
G(Rf) = -Rf/Rin == -40;
% Compute analytic solution of a symbolic equation
solution = solve(G,Rf);
% Display symbolic solution returned by solve
displaySymSolution(solution);
```

```
solution = 80000
```

$$R_f = 80k\Omega$$