

```
In[ ]:= SymFilling = RGBColor[0.296875`, 0.59765625`, 0];
SymBreakingFilling = RGBColor[0.8, 0, 0];
SymThreshold = Black;
```

```
In[ ]:= Sfp[x_] := x - Round[x]
```

```
In[ ]:= Resp =
```

```
Simplify[p /. Solve[
$$\frac{8 \left( \sqrt{p^4 - a^2 (p-2)^2 (p+2) (3p-2)} + 2 \right) - 4 p (p+4)}{(p-2)^3 (p+2)} == a^2, p]] /.$$

```

```
a -> Sfp[a];
```

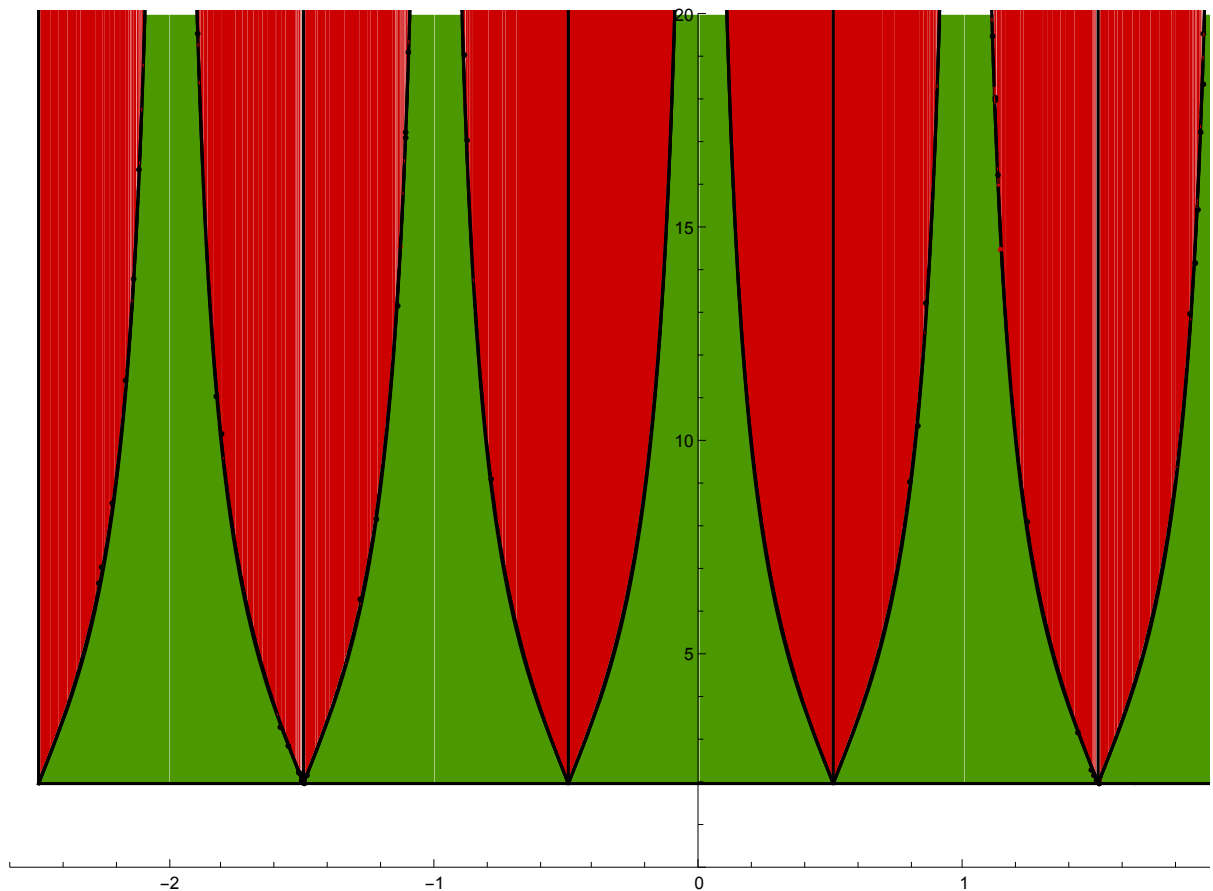
```
In[ ]:= Pl[amin_, amax_] :=
```

```
Show[Plot[
$$\left\{ \sqrt{4 + \frac{4}{\text{Sfp}[a]^2}} - 16, 2 \right\}, \{a, \text{amin}, \text{amax}\}, \text{PlotStyle} \rightarrow \text{Black},$$

Filling -> {1 -> {2}}, FillingStyle -> SymFilling, PlotRange -> {All, {0, 20}},
PlotPoints -> 100], Plot[{30, Resp[[3]]}, {a, amin, amax}, Filling -> {1 -> {2}},
FillingStyle -> SymBreakingFilling, PlotStyle -> Black, PlotPoints -> 400],
Plot[Resp[[3]], {a, amin, amax}, PlotStyle -> Black],
Show[Table[ListLinePlot[{{k - 0.5, 2}, {k - 0.5, 30}}, PlotStyle -> Black],
{k, Round[amin] - 1, Round[amax] + 1}], PlotRange -> {{amin, amax}, {0, 20}}]
```

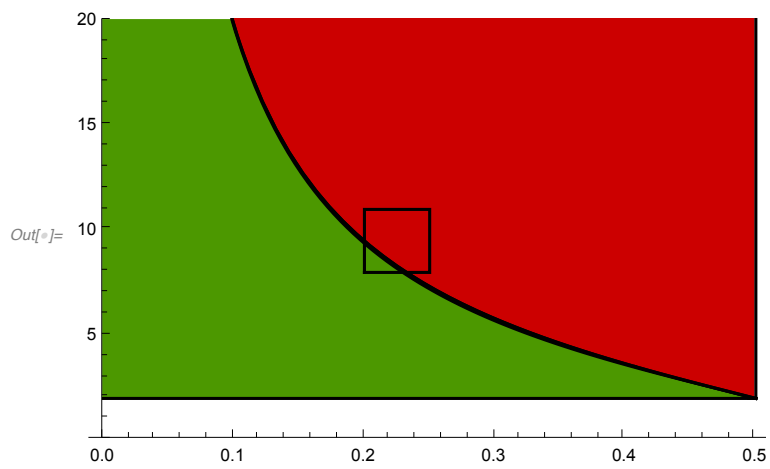
```
In[ ]:= Pl[-2.5, 2.5]
```

```
Out[ ]:=
```



In[]:=

```
Show[Pl[0, 0.5], ListLinePlot[
  {{0.2, 8}, {0.25, 8}, {0.25, 11}, {0.2, 11}, {0.2, 8}}, PlotStyle -> Black]]
```



In[]:=

```
Show[Pl[0, 0.5], PlotRange -> {{0.2, 0.25}, {8, 11}}]
```

