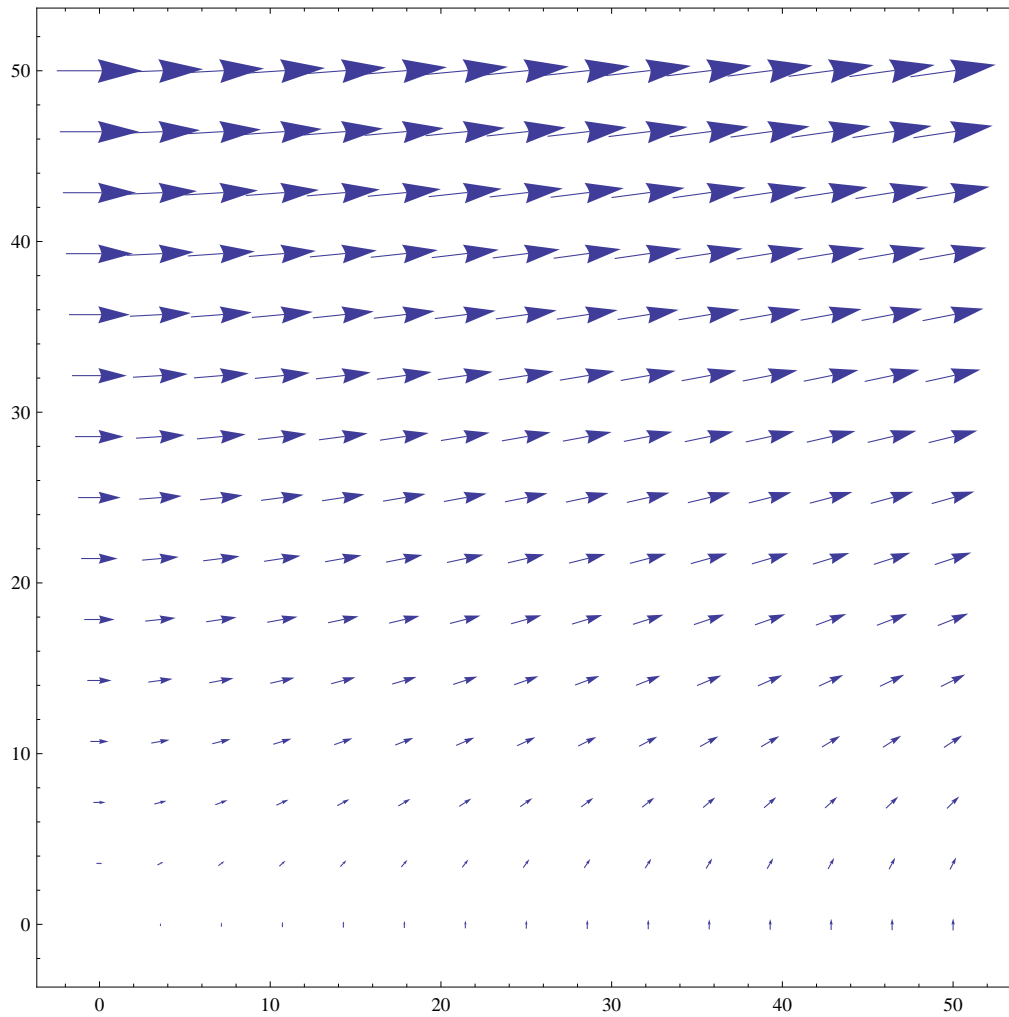```
VectorPlot[{y, Sqrt[x]}, {x, 0, 50}, {y, 0, 50}]
```



```
DSolve[y''[x] == Sqrt[y[x]], y[x], x]
```

$$\text{Solve}\left[\frac{\text{Hypergeometric2F1}\left[\frac{1}{2},\frac{2}{3},\frac{5}{3},-\frac{4\,y[x]^{3/2}}{3\,C[1]}\right]^2 y[x]^2\left(1+\frac{4\,y[x]^{3/2}}{3\,C[1]}\right)}{C[1]+\frac{4}{3}\,y[x]^{3/2}}==(x+C[2])^2,\,y[x]\right]$$

```
? Hypergeometric2F1
```

Hypergeometric2F1[a, b, c, z] is the hypergeometric function $_2F_1\,(a,\,b;\,c;\,z)$. »

```
Integrate[Sqrt[y / (c1 - y)], y]
```

$$\frac{\sqrt{\frac{y}{c1-y}}\left(\sqrt{y}\,(-c1+y)+c1\,\sqrt{c1-y}\,\text{ArcTan}\left[\frac{\sqrt{y}}{\sqrt{c1-y}}\right]\right)}{\sqrt{y}}$$