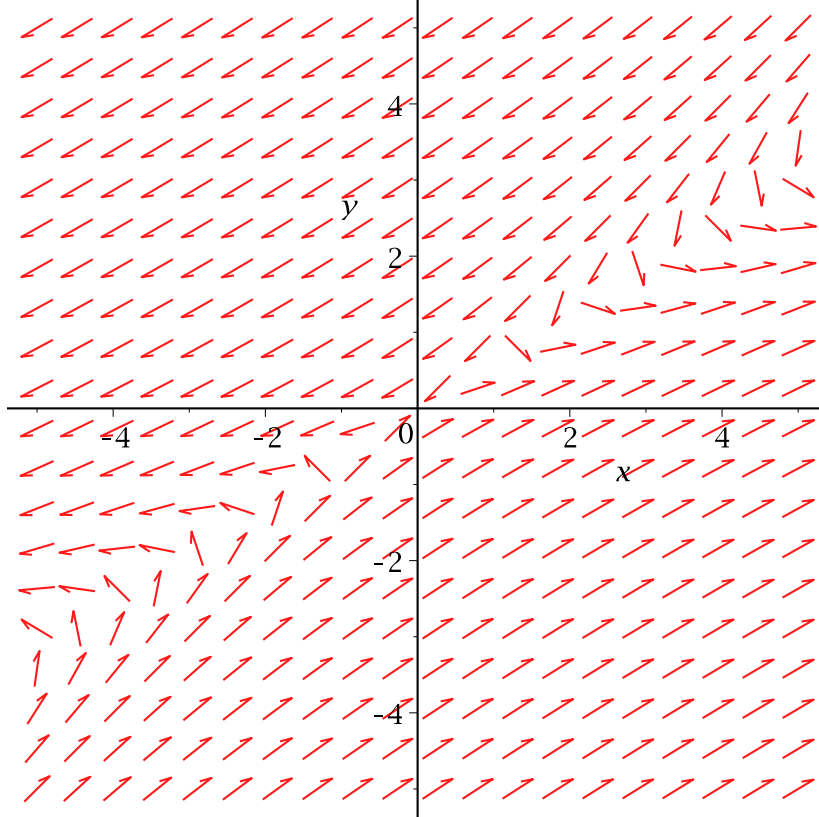


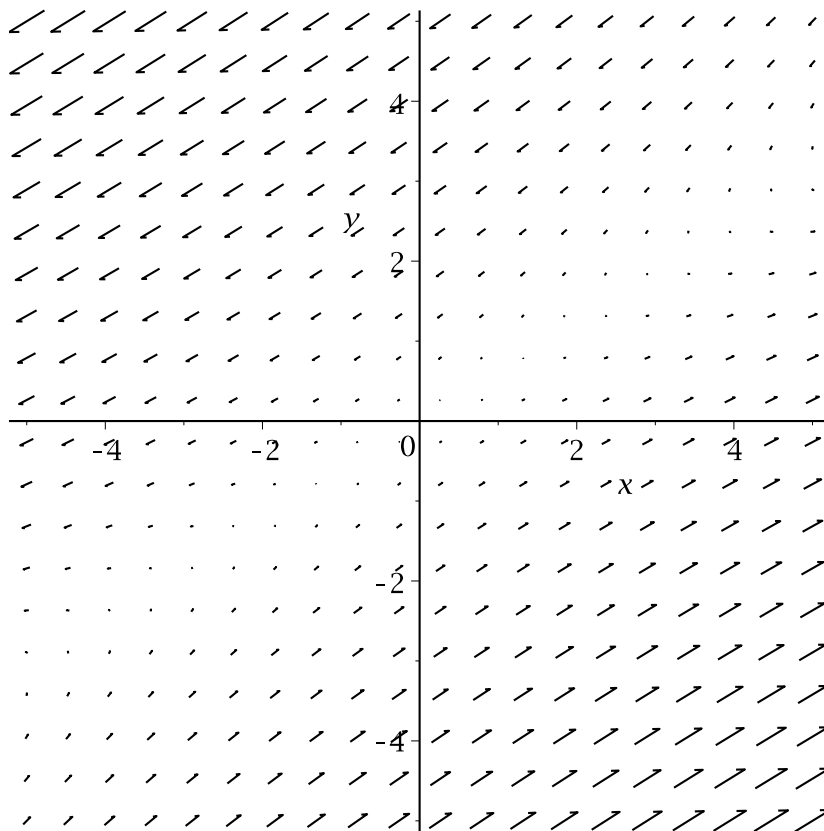
Direction field and vector field plots for Example 1 in first day lecture.

```
> with(DEtools):with(plots):
```

```
> dfieldplot([D(x)(t)=2*x(t)-3*y(t),D(y)(t)=x(t)-2*y(t)],[x(t),y(t)],t=0..1,x=-5..5,y=-5..5); #This is a direction field.
```



```
> fieldplot([2*x-3*y,x-2*y],x=-5..5,y=-5..5); # In a vector field the arrows have variable lengths
```



```
> phaseportrait([D(x)(t)=2*x(t)-3*y(t),D(y)(t)=x(t)-2*y(t)],[x(t),y
(t)],t=0..2,[[x(0)=1,y(0)=2]],x=-5..5,y=-5..5,linecolor=black); #
Our solution curve.
```

