

Animation: Rotating the Square

(Using plottools)

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```
> restart:  
with(plots):with(plottools):  
Warning, the name changecoords has been redefined  
Warning, the assigned name arrow now has a global binding
```

Define the square you want the student to see

```
> L1:=line([1,1], [1,-1], color=blue, thickness=5):  
L2:=line([-1,1], [1,1], color=red, thickness=5):  
L3:=line([-1,1], [-1,-1], color=green, thickness=5):  
L4:=line([-1,-1], [1,-1], color=yellow, thickness=5):  
Square:=display({L1, L2, L3, L4}):
```

Define a "rotate the square function", and build a list of plots to animate.

```
> R:=t->rotate(Square, t*Pi/8, [0,0]):  
Lst:=seq(R(t), t=0..16):
```

Use display with the insequence=true parameter to define the animation. Note: You'll want to adjust the speed.

```
> display(Lst, insequence=true);
```

