```
present
```

```
1 html"<button onclick='present()'>present</button>"
```

Curves

- Mathe 3 (CES)
- WS24
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```
1 using PlutoUI, Plots, Calculus
```

```
GRBackend()
```

```
1 gr()
```

Define a Curve

Define the curve γ :

$$\gamma:[0,6\pi] o\mathbb{R}^2, t\mapsto \gamma(t)=egin{pmatrix}\sin(t/3)\5\sin(2t)\end{pmatrix}$$

ν (generic function with 1 method)

```
begin
using LinearAlgebra

γ(t) = [5sin(t/3), 5sin(2t)]

γ(t) = 2.5 .* [cos(t/π), 4/5 * (sin(t/π) + sqrt(abs(cos(t/π))))] # heart

dγ(t) = derivative(γ,t)

τ(t) = dγ(t)./norm(dγ(t))

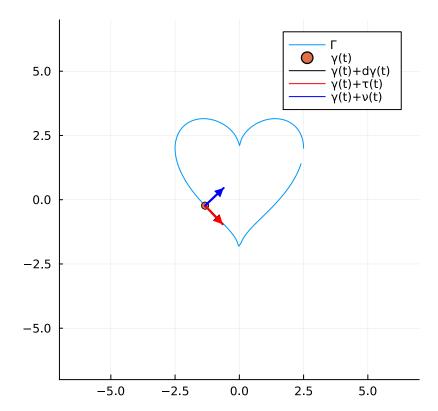
ν(t) = derivative(τ,t) / norm(derivative(τ,t))

end

end
```

[→] 13.03760951239764

1 of 2 18.12.24, 14:51



2 of 2