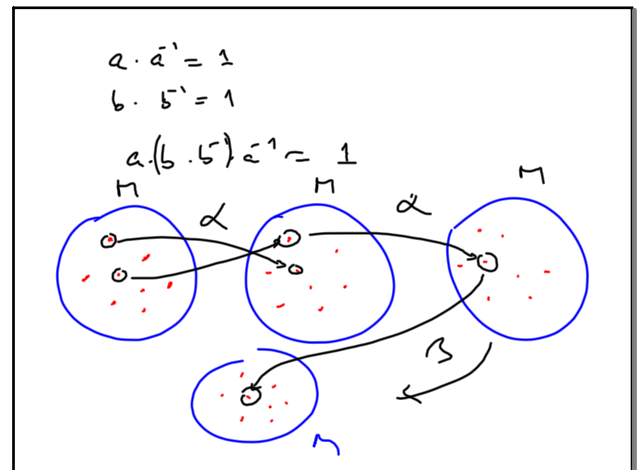
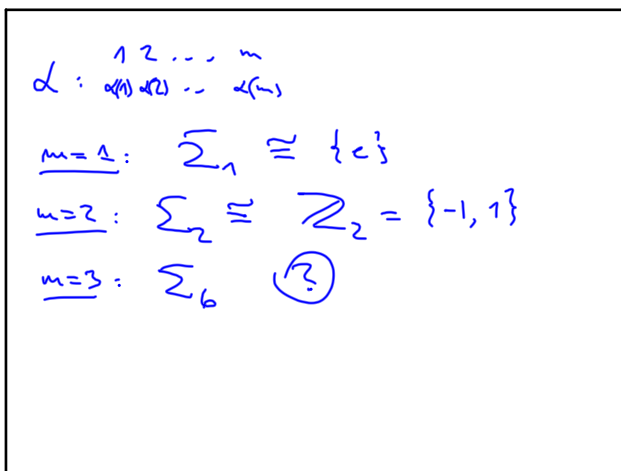


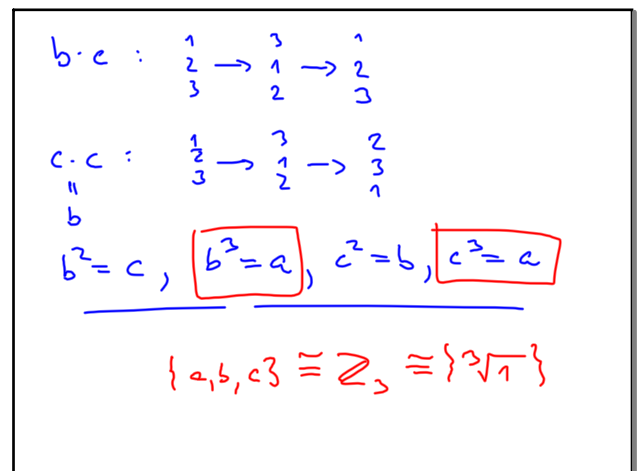
2 20-18:00



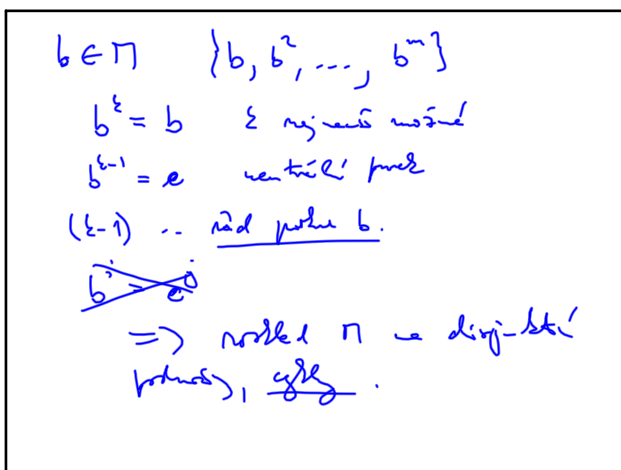
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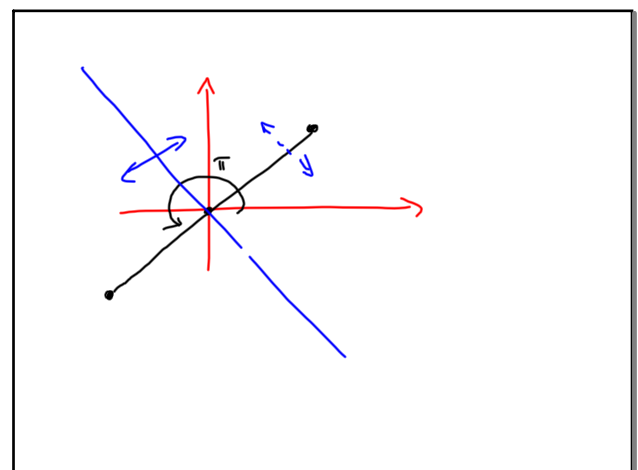
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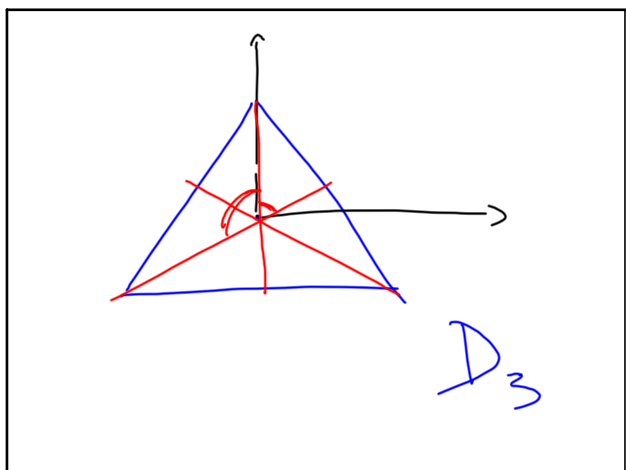
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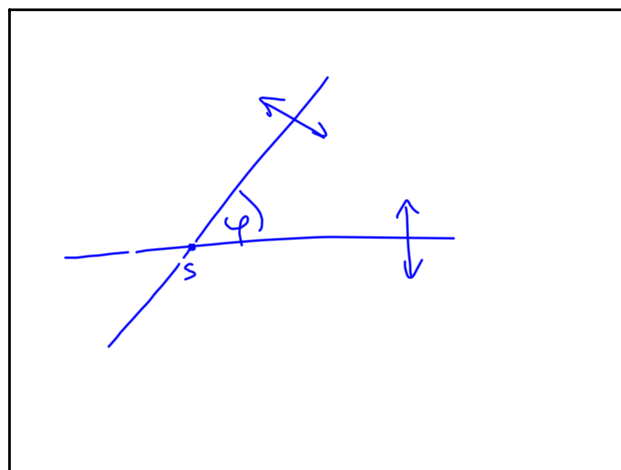
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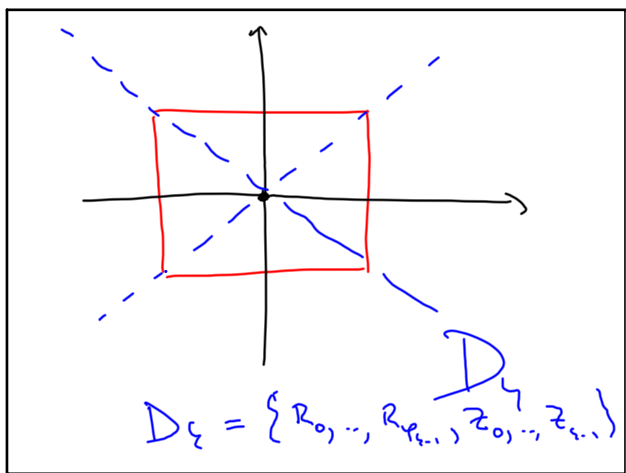
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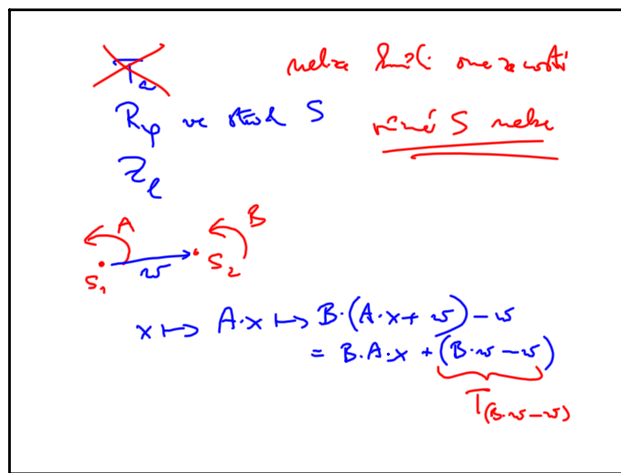
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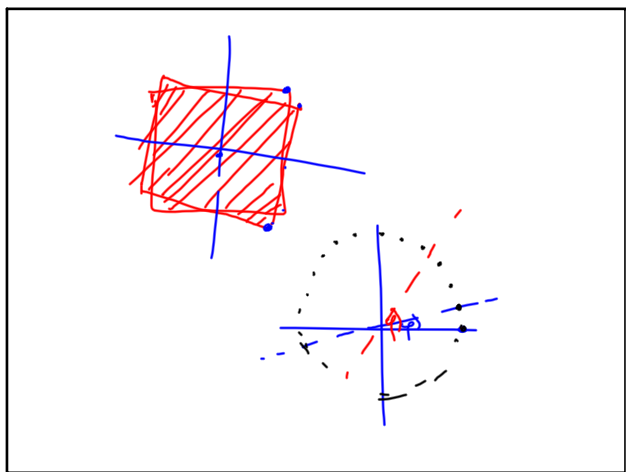
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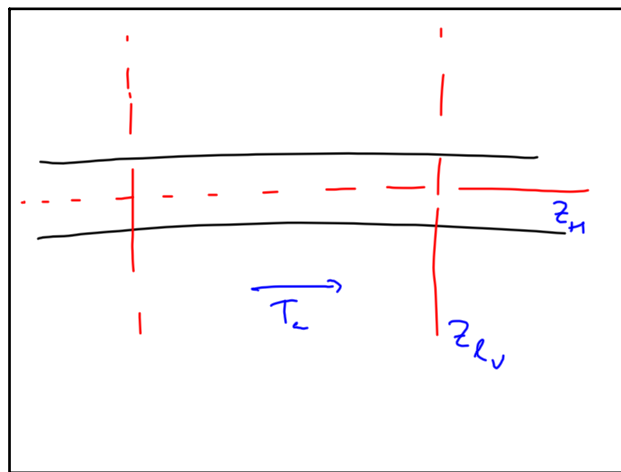
2 20-19:03



2 20-19:09



2 20-19:15



2 20-19:21

$$F: \mathbb{R}^n \rightarrow \mathbb{R}^m$$

$$\|F(x+v) - F(x)\| = \|v\|$$

$$F(x+tv) = F(x) + tDF(x) \cdot v + \frac{t^2}{2} D^2F(x)(v,v)$$

$$t\|v\| = t\|DF(x) \cdot v + \frac{t}{2} D^2F(x)(v,v) + \frac{t^2}{6} \dots\|$$

$$\frac{\partial}{\partial t} \Big|_{t=0} : \|v\| = 1 \cdot \|DF(x) \cdot v\| + 0 \cdot \frac{\partial}{\partial t} \Big|_{t=0} \|\dots\|$$

$$\frac{\partial^2}{\partial t^2} \Big|_{t=0} 0 = \frac{\partial}{\partial t} \Big|_{t=0} \|DF(x) \cdot v + \frac{t}{2} D^2F(x)(v,v)\|$$

$$t \cdot \frac{\partial^2}{\partial t^2} \Big|_{t=0} \dots$$

2 20-19:27