Stéphane Crépey, Financial Modeling: A Backward Stochastic Differential Equations Perspective - Notes

Lee Wei Xuan

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Exercise 1.3.11

Follows from Exercise 1.3.12

Exercise 1.3.12

$$\mathbb{1}_{\{\min(\nu,\theta)\}} = (1 - \mathbb{1}_{\{\nu<n\}}) \cdot (1 - \mathbb{1}_{\{\theta<n\}}) \cdot (\mathbb{1}_{\{\nu=n\}} + \mathbb{1}_{\{\theta=n\}} - \mathbb{1}_{\{\nu=n\}} \cdot \mathbb{1}_{\{\theta=n\}})$$

$$\mathbb{1}_{\{\max(\nu,\theta)\}} = \mathbb{1}_{\{\nu=n\}} \cdot \mathbb{1}_{\{\theta\leq n\}} + \mathbb{1}_{\{\theta=n\}} \cdot \mathbb{1}_{\{\nu\leq n\}}$$