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'Demonstrate all this with diagrams': Recovering mathematical practice from early modern navigation exams

Navigators in early modern Europe faced rigorous professional examinations. Those of the Dutch East India Company, in particular, required candidates to solve advanced mathematical problems. Drawing on the few surviving examples of these 17th- and 18th-century exams, this paper will explore how these examinations shaped classroom curricula and student practice. By responding to the examiners' instructions—to consult tables, draw diagrams, and show their work—these mariners learned to use trigonometric and logarithmic tables, and became comfortable with a variety of other mathematical techniques. Exams should be seen not just as the culmination of maritime training programs, but also as a starting point: the moment when a wide range of practitioners began to engage with the nuts and bolts of celestial navigation.