

Name: _____

Date: _____

Pre Calculus 11 Chapter 2 Trigonometry Practice Test

- Given a scalene triangle $\triangle ABC$ where $\angle A = 29^\circ$, $a = 54\text{cm}$, and $b = 63\text{cm}$. Solve $\triangle ABC$. Show all your work and steps (6 marks)

- Two ships sail from the same port. The first ship sails on a bearing of 22° at a speed of 12km/h . The second ship sails on a bearing of 310° at a speed of 9km/h . How far will the two ships be apart after 2.5 hours? Show all your work and steps (5marks)

3. Solve the equation for $0 \leq \theta \leq 360^\circ$. $6\cos^2 \theta + 11\cos \theta = 10$. Show all your work and steps.

4. Given that $\sin \theta = \frac{3}{7}$ and $90^\circ \leq \theta \leq 180^\circ$, what is the exact value of the equation below. Show all your work and steps (4 marks) $2(\cos \theta) - 4(\tan \theta) + 14(\sin \theta)$