

Name: _____

Date: _____

Use a Computer Algebra System to find Reciprocal Trigonometric Ratios

BLM 4-6

A computer algebra system (CAS) such as the one found on the TI-Nspire™ CAS graphing calculator can display exact or approximate values of the reciprocal trigonometric ratios.

Tools

- TI-Nspire™ CAS graphing calculator

1. Turn on the TI-Nspire™ CAS graphing calculator. Open a new calculator page.
2. Enter $\csc(60)$, and press `enter`.
Notice how the result is displayed.
3. Enter $\csc(60)$. Press `ctrl`, and then press `enter`.
Notice how the result is displayed.
4. Try several other reciprocal trigonometric ratios of special angles:
 - a) $\sec 45^\circ$
 - b) $\cot 30^\circ$
 - c) $\csc 45^\circ$
5. Try angles in other quadrants, and compare the results to the entries on your summary sheet of exact trigonometric ratios.

