Chapter 7 – Section 7.7 Trigonometric Relationships and Identities

TICKET-IN-THE-DOOR

In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class. Make sure you have your Summary of Trig Relationships handy. Check your understanding:

1. Find the **exact values** of the following <u>without a calculator</u>! (Hint: Use reference angles and special right triangles)

   a. $\tan\left(\frac{2\pi}{3}\right)$

   b. $\cot\left(\frac{\pi}{4}\right)$

   c. $\sec\left(\frac{11\pi}{6}\right)$

2. Simplify $3\sin^2(8t) + 2\cos^2(8t)$. (Hint: Use Pythagorean identity)

3. If $\frac{\pi}{2} \leq \theta \leq \pi$ and $\sin\theta = \frac{4}{5}$, find the **exact value** of <u>$\cos\theta$</u> and <u>$\cot\theta$</u>.

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