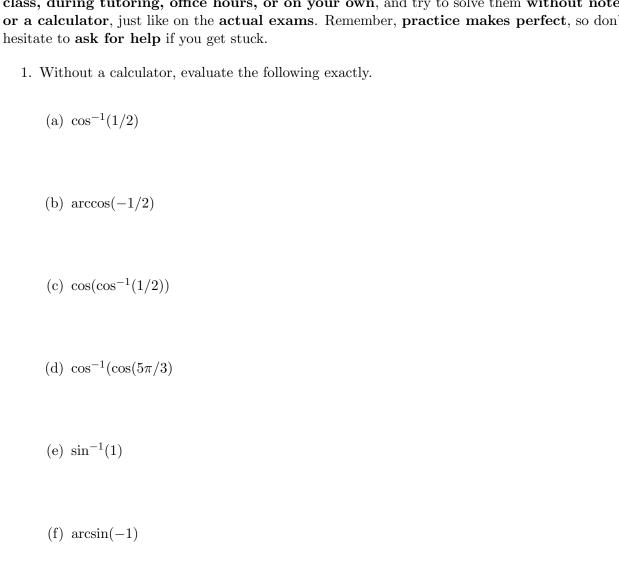
Practice Problems for Math Success

Inverse Trignometric Functions

These practice problems are designed to help you prepare for our course exams and assess your understanding of the course material at the expected level. Aim to complete them in class, during tutoring, office hours, or on your own, and try to solve them without notes or a calculator, just like on the actual exams. Remember, practice makes perfect, so don't hesitate to ask for help if you get stuck.



(h) $\arctan(1)$

2. (a) Compute $\arcsin\left(\frac{-\sqrt{3}}{2}\right) + \arctan(1)$.

(b) Find the exact value of

$$\tan\left(\cos^{-1}\left(-\frac{1}{5}\right)\right)$$

3. Use the trigonometric identity

$$\sin(\theta + \phi) = \sin(\theta)\cos(\phi) + \sin(\phi)\cos(\theta)$$

to find the exact value of

$$\sin\left(\tan^{-1}\left(\frac{1}{4}\right) + \cos^{-1}\left(\frac{4}{5}\right)\right).$$

Show all your work.