MAT130 HW4

Each problem is worth 2 points

**Problem 8 from 4.1** Use the fundamental identities to find the exact values of the remaining trigonometric functions of $x$, given that $\cos x = \frac{\sqrt{7}}{4}$ and $\cot x = -\frac{\sqrt{7}}{3}$.

**Problem 28 from 4.1** Use the fundamental identities to find the exact values of the remaining trigonometric functions of $x$, given that $\cot x = -\frac{3}{2}$ and $\csc x > 0$.

**Problem 40 from 4.1** Simplify: $\cos x + \sin x \tan x$.

**Problem 16 from 4.2** Verify the identity: $\frac{\cos x - \sin x}{\sin x \cos x} = \csc x - \sec x$.

**Problem 4 from 4.3** Verify that $\tan(x + \pi) = \tan x$ using sum identities.