\[
\begin{align*}
\sin(s \pm t) &= \sin s \cos t \pm \cos s \sin t \\
\cos(s + t) &= \cos s \cos t - \sin s \sin t \\
\cos(s - t) &= \cos s \cos t + \sin s \sin t \\
\tan(s + t) &= \frac{\tan s + \tan t}{1 - \tan s \tan t} \\
\tan(s - t) &= \frac{\tan s - \tan t}{1 + \tan s \tan t}
\end{align*}
\]

5. Write with no products and no \(\pi\): 4 or 6 symbols. \(\cos\left(\frac{\pi}{8}\right) \cos\left(x - \frac{5\pi}{8}\right) - \sin\left(\frac{\pi}{8}\right) \sin\left(x - \frac{5\pi}{8}\right) = \) 4 symb, chk=0

6. Find the exact answer, 6 symbols. \(\tan(x) = 5, \tan(y) = 6, \tan(x + y) = \) 6 symb, chk=13

6. Write in terms of \(\tan(x)\) and no \(\pi\): \(\tan\left(x - \frac{\pi}{6}\right) = \)

Answers involving fractions of fractions must be simplified to a single fraction. Leave \(\sqrt{3}\), in the denominator. 16 symbols, 20 with ( )s.