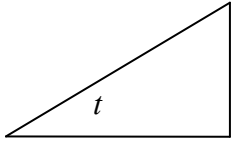


Practice Exam Chap 8
Math 144

1. Find the exact value of $\sin\left(\frac{\pi}{4} + \frac{\pi}{6}\right)$
2. Find all solutions to $\sin x = -\frac{\sqrt{3}}{2}$ within the interval $[0, 2\pi]$
3. Find all solutions of the equation $2 \cos^2 x - 7 \cos x + 3 = 0$ within the interval $[0, 2\pi]$. Express your answers in radians.
4. If $\csc \theta = -3$ and $\pi < \theta < 3\pi/2$, compute $\sin(\theta/2)$.

5. Find $\cos(2t)$ given that t is an acute angle of a right triangle with side opposite of length 7 and side adjacent of length 24.



6. Determine all solutions to $\sin(\theta) = \sqrt{2}/2$.

7. Use a calculator to find all solutions to $\cos(t) = -0.567$ in the interval $[0, 2\pi]$. Give your answers accurate to 4 decimal places.

