

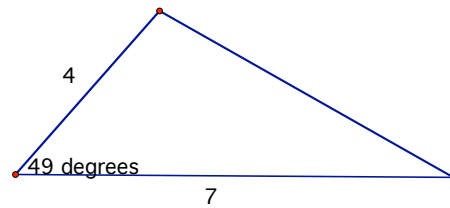
Trig Practice

- Let $\pi < \theta < \frac{3\pi}{2}$ and $\cos \theta = \frac{-8}{17}$.
 - There are at least two ways you can find the exact value of $\sin \theta$. Employ one of these methods to find $\sin \theta$.
 - Find one other method you could have used to answer (a). Explain each, step by step below. (Consider asking another group since they might have employed one a method different from yours.)
 - Find the exact value of $\sin(\theta + \theta)$.
 - Find the exact value of $\cos(2\theta)$.
- Let $\frac{\pi}{2} < \theta < \pi$ and $-\frac{\pi}{2} < \phi < 0$. Given that $\sin \theta = \frac{3}{4}$ and that $\cos \phi = \frac{1}{5}$, find $\cos(\theta + \phi)$.

3. The triangle below is a right triangle with one of the angles specified.

(a) Find $\cos 49^\circ$.

(b) Find $\tan 49^\circ$.



4. Find the exact values of each expression below:

(a) $\arcsin \frac{1}{\sqrt{2}}$.

(b) $\sin^{-1} \frac{-1}{\sqrt{2}}$.

(c) $\cos^{-1} \frac{1}{2}$.

(d) $\cos(\sin^{-1} \frac{4}{7})$

Note, that the last one can be completed in two different ways. Both are written up in their entirety in Example 3 on page 552 of your text. (I like the second method better.)

5. Draw $\sin \theta$, $\cos \theta$, and $\tan \theta$ on the axes below.

