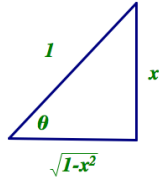
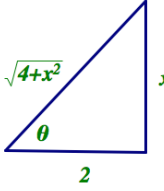


Use this trig	if you see this & w-sub fails	pic	reduced radical	via algebra	via pic
$x = a \sin \theta$ $dx = a \cos \theta d\theta$	$\sqrt{a^2 - x^2}$		$a \cos \theta$	$\sqrt{a^2 - a^2 \sin^2 \theta}$ $= \sqrt{a^2(1 - \sin^2 \theta)}$ $= \sqrt{a^2(\cos^2 \theta)}$ $= \sqrt{(a \cos \theta)^2}$ $= a \cos \theta$	$\cos \theta = \frac{\sqrt{a^2 - x^2}}{a}$ mult by a
$x = a \tan \theta$ $dx = a \sec^2 \theta d\theta$	$\sqrt{a^2 + x^2}$		$a \sec \theta$	$\sqrt{a^2 + a^2 \tan^2 \theta}$ $= \sqrt{a^2(1 + \tan^2 \theta)}$ $= \sqrt{a^2(\sec^2 \theta)}$ $= \sqrt{(a \sec \theta)^2}$ $= a \sec \theta$	$\sec \theta = \frac{1}{\cos \theta}$ $\sec \theta = \frac{\sqrt{a^2 + x^2}}{a}$ mult by a

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