

Worksheet 7.1 #22

22. d

Jan 22-4:12 PM

6.4 Inverse of Trig Functions

PreCalc
Ch 8 Day 1

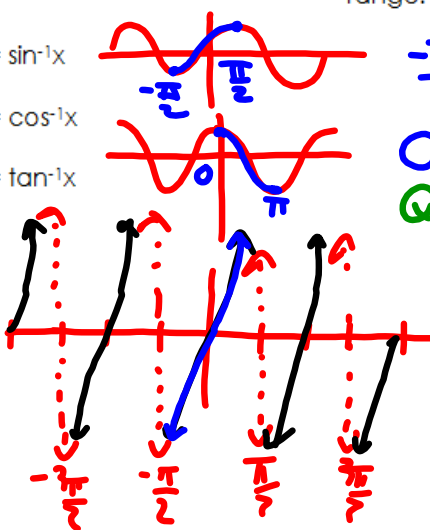
 Look at pictures in Text, pg 560 – 561

range:

$y = \sin^{-1}x$

$y = \cos^{-1}x$

$y = \tan^{-1}x$



$-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$

$0 \leq y \leq \pi$

$-\frac{\pi}{2} < y < \frac{\pi}{2}$

QIV

QI

$-\frac{\pi}{2}, -\frac{\pi}{4}, 0, \frac{\pi}{4}, \frac{\pi}{2}$

$0, \frac{\pi}{6}, \frac{\pi}{4}, \frac{\pi}{3}, \frac{\pi}{2}$

Jan 19-8:42 AM

Find the exact value, in radians:

1. $\sin^{-1}\left(-\frac{\sqrt{3}}{2}\right) : -\frac{\pi}{3}$ 2. $\cos^{-1}\left(\frac{\sqrt{2}}{2}\right) : \frac{\pi}{4}$

.. The angle whose sin is $-\frac{\sqrt{3}}{2}$ " The angle whose cos is $\frac{\sqrt{2}}{2}$

3. $\tan^{-1}(0) : 0$

4. $\csc^{-1}(\sqrt{2})$
 $\sin^{-1}\left(\frac{\sqrt{2}}{2}\right) : \frac{\pi}{4}$

5. $\sec^{-1}(-2)$

$\cos^{-1}\left(-\frac{1}{2}\right) : \frac{2\pi}{3}$
 Q11

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Evaluate. Exact values. Leave answers in terms of π or in simplest radical form.

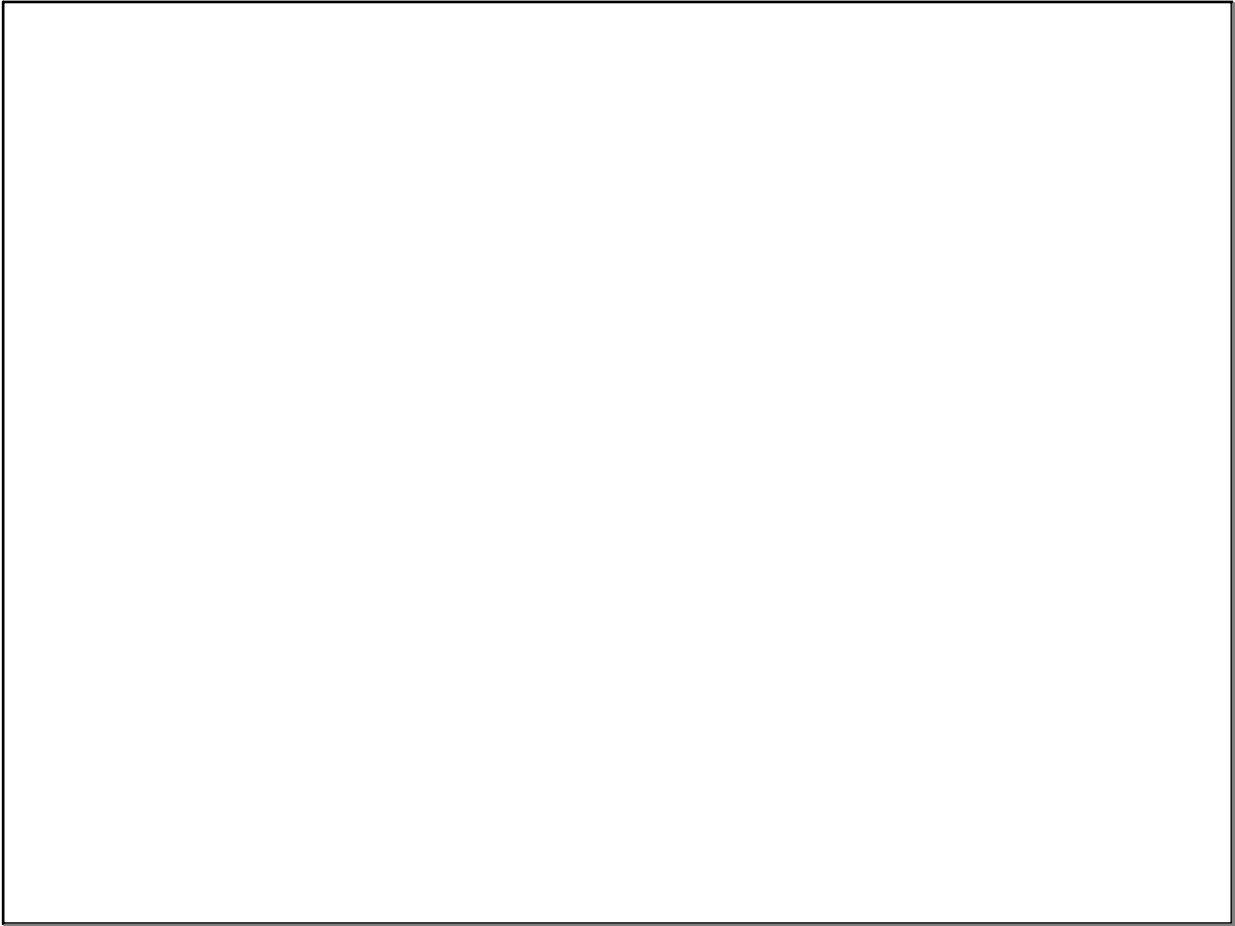
6. $\sin^{-1}\left(\cos\frac{\pi}{6}\right)$

7. $\sin\left(\tan^{-1}\frac{\sqrt{3}}{3}\right)$

8. $\tan^{-1}\left(\tan\frac{2\pi}{3}\right)$

9. $\tan(\sin^{-1}.1)$

Jan 19-8:45 AM



Jan 19-3:54 PM