

# Inverse Trig Day 1 Hwk: Answers (1-45) odd

(1) False; inverse sine  $[-\frac{\pi}{2}, \frac{\pi}{2}]$  + inverse cos  $[0, \pi]$

(3) False;  $\frac{11\pi}{6}$  is not  $[-\frac{\pi}{2}, \frac{\pi}{2}]$ ;  $\arcsin(-\frac{1}{2}) = -\frac{\pi}{6}$

(5)  $\frac{\pi}{4}$     (7)  $-\frac{\pi}{3}$     (9)  $\frac{3\pi}{4}$     (11)  $\frac{2\pi}{3}$     (13)  $\frac{3\pi}{4}$

(15)  $-60^\circ$

(17)  $60.679^\circ$     (19)  $36.490^\circ$     (21)  $73.262^\circ$

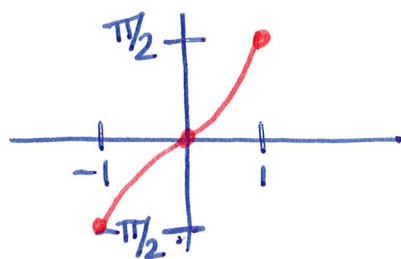
(23) An angle will never have a sine value of 3.  
or no solution because 3 is not between  $-1 \leq x \leq 1$ .

(25)  $(-\infty, +\infty)$

(27)  $\frac{1}{2}$     (29)  $-1$     (31)  $\frac{3\pi}{4}$     (33)  $\frac{\pi}{4}$

(35)  $\frac{\sqrt{7}}{4}$     (37)  $\frac{\sqrt{3}}{2}$     (39)  $\frac{294 + 125\sqrt{6}}{92}$

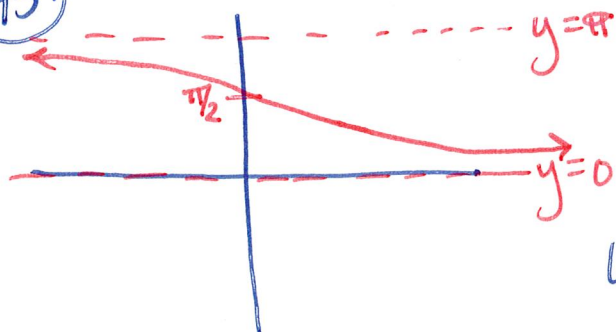
(41)  $\sqrt{1-u^2}$     (43)



D:  $[-1, 1]$

R:  $[-\frac{\pi}{2}, \frac{\pi}{2}]$

(45)



D:  $(-\infty, +\infty)$

R:  $(0, \pi)$

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