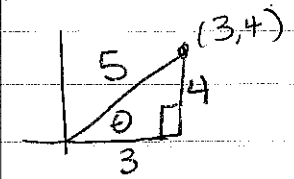
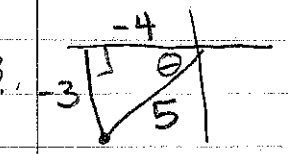
pg 251 #1-7 odd, 33-40 all

1. 

$S = \frac{4}{5}$ $\quad Csc = \frac{5}{4}$

$C = \frac{3}{5}$ $\quad Sec = \frac{5}{3}$

$T = \frac{4}{3}$ $\quad Cot = \frac{3}{4}$

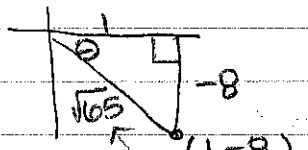
3. 

(-4,-3)

$S = \frac{-3}{5}$ $\quad Csc = \frac{-5}{3}$

$C = \frac{-4}{5}$ $\quad Sec = \frac{-5}{4}$

$T = \frac{-3}{-4} = \frac{3}{4}$ $\quad Cot = \frac{4}{3}$

5. 

$1^2 + (-8)^2 = c^2$

$1 + 64 = c^2$

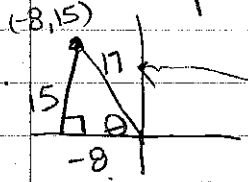
$65 = c^2$

$\sqrt{65} = c$

$S = \frac{-8}{\sqrt{65}} = \frac{-8\sqrt{65}}{65}$ $\quad CSC = \frac{-\sqrt{65}}{8}$

$C = \frac{1}{\sqrt{65}} = \frac{\sqrt{65}}{65}$ $\quad Sec = \sqrt{65}$

$T = \frac{-8}{1} = -8$ $\quad Cot = \frac{-1}{8}$

7. 

$(-8)^2 + 15^2 = c^2$

$289 = c^2$

$17 = c$

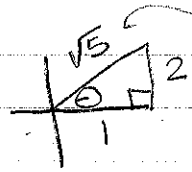
$S = \frac{15}{17}$ $\quad CSC = \frac{17}{15}$

$C = \frac{-8}{17}$ $\quad Sec = \frac{-17}{8}$

$T = \frac{-15}{8}$ $\quad Cot = \frac{-8}{15}$

S	A
T	C

33. x | (x)



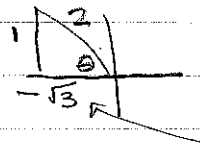
$2^2+1^2=c^2$
$4+1=c^2$
$\sqrt{5}=c$

$S=\frac{2}{\sqrt{5}}=\boxed{\frac{2\sqrt{5}}{5}}$ $\quad CSC=\boxed{\frac{\sqrt{5}}{2}}$

$C=\frac{1}{\sqrt{5}}=\boxed{\frac{\sqrt{5}}{5}}$ $\quad Sec=\boxed{\sqrt{5}}$

$T=\boxed{2}$ $\quad T=\boxed{\frac{1}{2}}$

34. (x) | x $\quad CSC=\frac{2}{1}\ \frac{h}{0}$



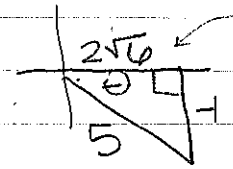
$1^2+b^2=2^2$
$1+b^2=4$
$b^2=3$
$b=\sqrt{3}$

$S=\boxed{\frac{1}{2}}$ $\quad CSC=\boxed{2}$

$C=\boxed{\frac{-\sqrt{3}}{2}}$ $\quad Sec=\frac{2}{-\sqrt{3}}=\boxed{\frac{-2\sqrt{3}}{3}}$

$T=\frac{1}{-\sqrt{3}}=\boxed{\frac{-\sqrt{3}}{3}}$ $\quad Tan=\boxed{-\sqrt{3}}$

35. x | (x)



$(-1)^2+b^2=5^2$
$1+b^2=25$
$b^2=24$
$b=2\sqrt{6}$

$S=\boxed{\frac{-1}{5}}$ $\quad CSC=\boxed{-5}$

$C=\boxed{\frac{2\sqrt{6}}{5}}$ $\quad Sec=\frac{5}{2\sqrt{6}}=\boxed{\frac{5\sqrt{6}}{12}}$

$T=\frac{-1}{2\sqrt{6}}=\boxed{\frac{-\sqrt{6}}{12}}$ $\quad Cot=\boxed{-2\sqrt{6}}$

S	A
T	C

36.

x	-12
(x)	θ
-5	13

$S = \frac{-5}{13}$ $\quad CSC = \frac{-13}{5}$

$C = \frac{-12}{13}$ $\quad Sec = \frac{-13}{12}$

$T = \frac{-5}{-12} = \frac{5}{12}$ $\quad Cot = \frac{12}{5}$

37.

x	1
(x)	θ L
	$\sqrt{3}$ $\sqrt{2}$

$sec = \frac{\sqrt{3}}{1}$ $\quad \frac{h}{a}$ $\quad 1^2 + b^2 = \sqrt{3}^2$

$1 + b^2 = 3$

$b^2 = 2$

$b = \sqrt{2}$

$S = \frac{-\sqrt{2}}{\sqrt{3}} = \frac{-\sqrt{6}}{3}$ $\quad CSC = \frac{3}{-\sqrt{6}} = \frac{-3\sqrt{6}}{6} = \frac{-\sqrt{6}}{2}$

$C = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$ $\quad Sec = \sqrt{3}$

$T = \frac{-\sqrt{2}}{1} = -\sqrt{2}$ $\quad Cot = \frac{1}{-\sqrt{2}} \quad \frac{-\sqrt{2}}{2}$

38.

(x)	x	-1
	-1	θ
		$\sqrt{2}$

$(-1)^2 + (-1)^2 = c^2$

$1 + 1 = c^2$

$2 = c^2$

$\sqrt{2} = c$

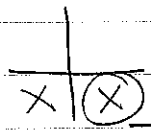
$S = \frac{-1}{\sqrt{2}} = \frac{-\sqrt{2}}{2}$ $\quad CSC = -\sqrt{2}$

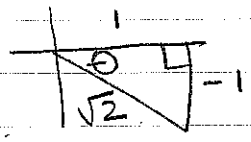
$C = \frac{-1}{\sqrt{2}} = \frac{-\sqrt{2}}{2}$ $\quad Sec = -\sqrt{2}$

$T = \frac{-1}{-1} = 1$ $\quad Cot = 1$

S	A
T	C

39.



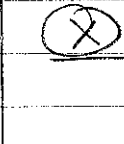


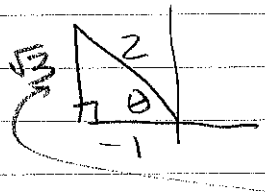
$S = \frac{-1}{\sqrt{2}} = \frac{-\sqrt{2}}{2}$ $\quad CSC = -\sqrt{2}$

$C = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$ $\quad Sec = \sqrt{2}$

$T = \frac{-1}{1} = -1$ $\quad cot = -1$

40.





$(-1)^2 + b^2 = 2^2$

$1 + b^2 = 4$

$b^2 = 3$

$b = \sqrt{3}$

$S = \frac{\sqrt{3}}{2}$ $\quad CSC = \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$

$C = \frac{-1}{2}$ $\quad Sec = -2$

$T = \frac{\sqrt{3}}{-1} = -\sqrt{3}$ $\quad cot = \frac{-1}{\sqrt{3}} = \frac{-\sqrt{3}}{3}$