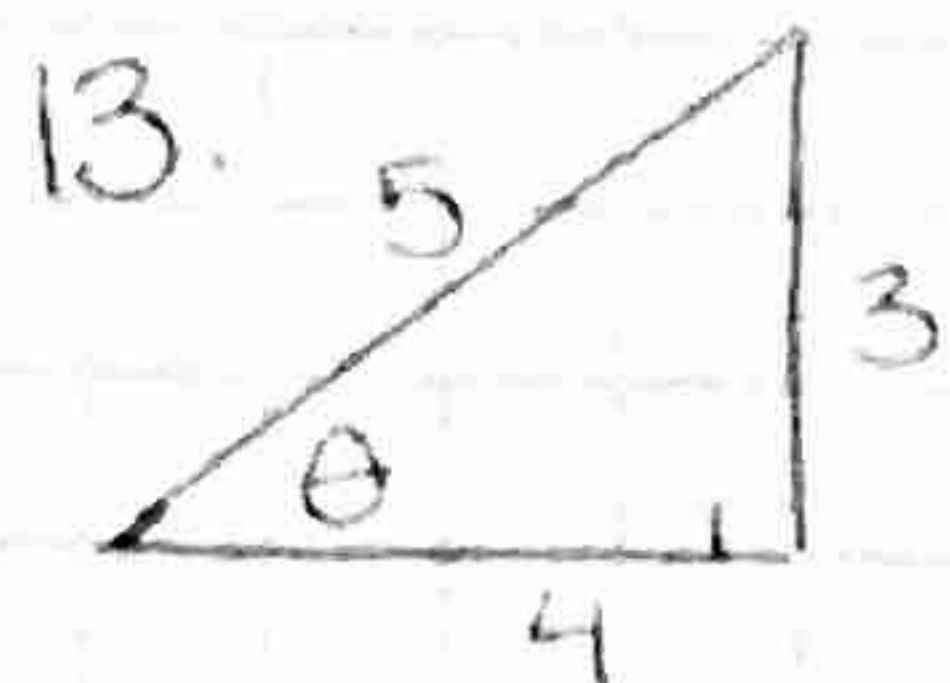


HW 77

p4103

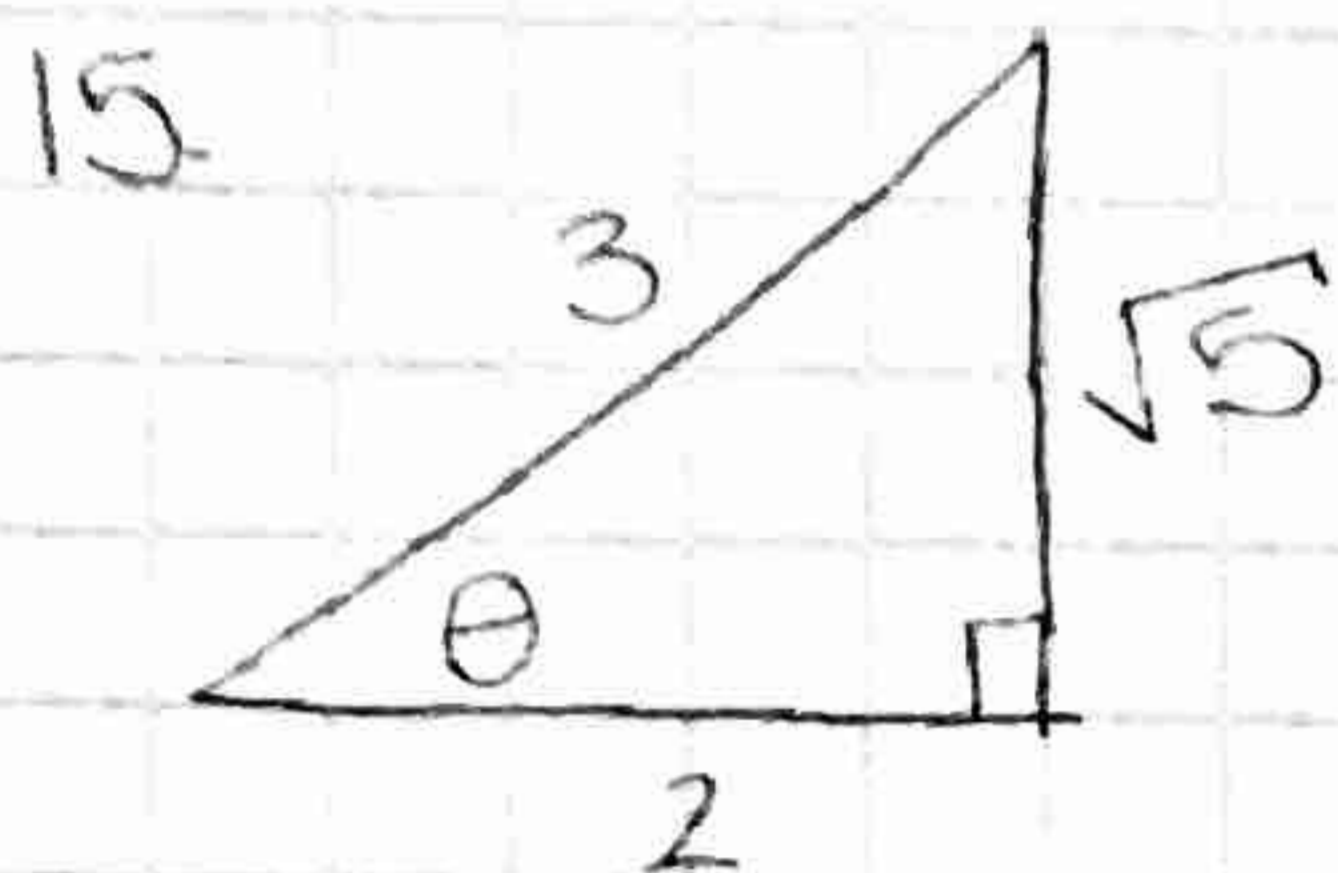


$$\begin{aligned} \sin \theta &= 3/5 & \csc \theta &= 5/3 \\ \cos \theta &= 4/5 & \sec \theta &= 5/4 \\ \tan \theta &= 3/4 & \cot \theta &= 4/3 \end{aligned}$$

59. a) $\csc \theta = \frac{2\sqrt{3}}{3} \rightarrow \frac{\sin \theta}{\cos \theta} = \frac{\sqrt{3}}{2}$

$60^\circ \text{ ; } \pi/3$

b) $45^\circ \text{ ; } \pi/4$



$$\begin{aligned} 9 &= 4 + b^2 \\ 5 &= b^2 \end{aligned}$$

$$\begin{aligned} \sin \theta &= \sqrt{5}/3 & \csc \theta &= 3/\sqrt{5} \\ \cos \theta &= 2/3 & \sec \theta &= 3/2 \\ \tan \theta &= \sqrt{5}/2 & \cot \theta &= 2/\sqrt{5} \end{aligned}$$

55. a) $30^\circ \text{ / } \pi/6$

b) $\csc \theta = 2 \rightarrow \sin \theta = 1/2$
 $30^\circ \text{ ; } \pi/6$

56. a) $45^\circ \text{ ; } \pi/4$

b) $45^\circ \text{ ; } \pi/4$

57. a) $\sec \theta = 2 \rightarrow \cos \theta = 1/2$
 $60^\circ \text{ ; } \pi/3$

b) $45^\circ \text{ ; } \pi/4$

58. a) $60^\circ \text{ ; } \pi/3$

b) $60^\circ \text{ ; } \pi/3$