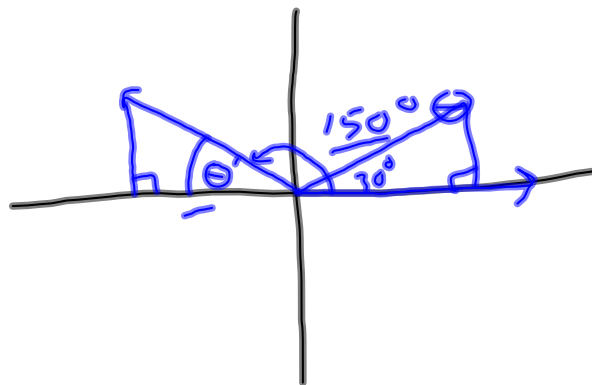


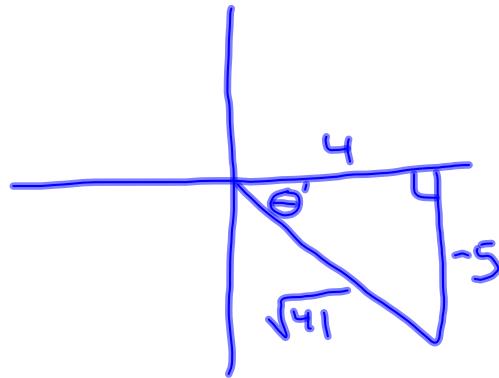
4-4 Trigonometric Functions

reference angle -



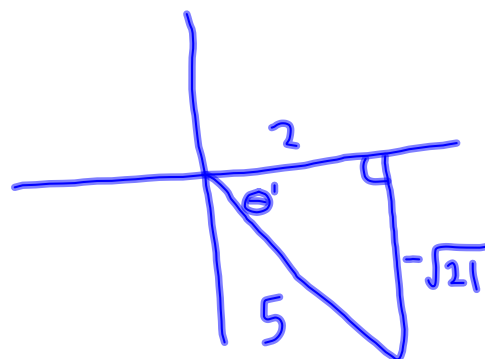
Ex 1 If $\tan \theta = -\frac{5}{4}$ and $\cos \theta > 0$, find:

$$\begin{array}{l} \sin \theta = -\frac{5\sqrt{41}}{41} \\ \cos \theta = \frac{4\sqrt{41}}{41} \\ \tan \theta = -\frac{5}{4} \\ \cot \theta = -\frac{4}{5} \\ \sec \theta = \frac{41}{4\sqrt{41}} \\ \csc \theta = -\frac{41}{5\sqrt{41}} \end{array}$$

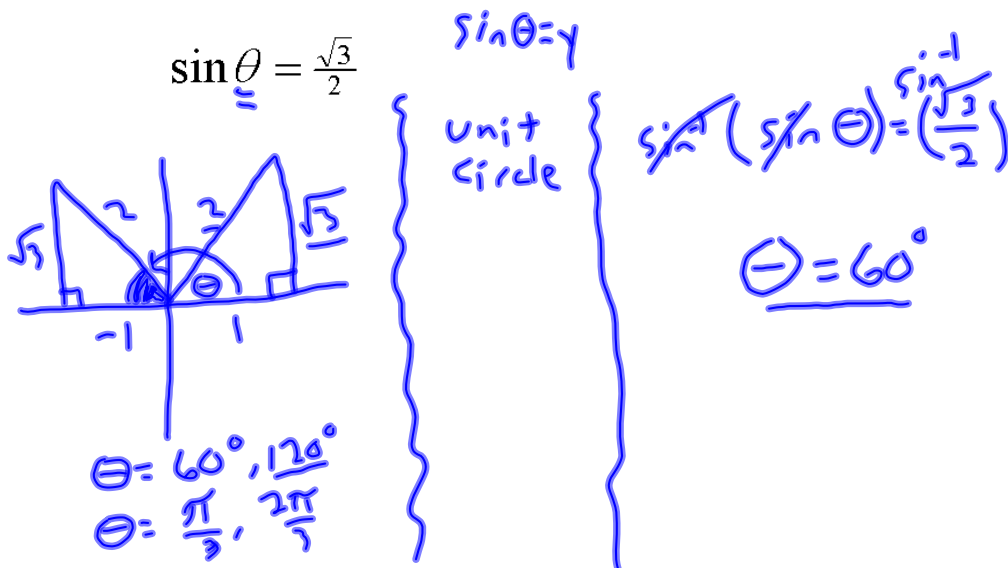


Ex 2 If $\cos \theta = \frac{2}{5}$ and $\sin \theta < 0$, find:

$$\begin{array}{l} \sin \theta = -\frac{\sqrt{21}}{5} \\ \cos \theta = \frac{2}{5} \\ \tan \theta = -\frac{\sqrt{21}}{2} \\ \cot \theta = -\frac{2\sqrt{21}}{21} \\ \sec \theta = \frac{5}{2} \\ \csc \theta = -\frac{5\sqrt{21}}{21} \end{array}$$



Ex 3 Give two values of θ that satisfy the equation. Give your answer in degrees ($0^\circ \leq \theta < 360^\circ$) and radians ($0 \leq \theta < 2\pi$)

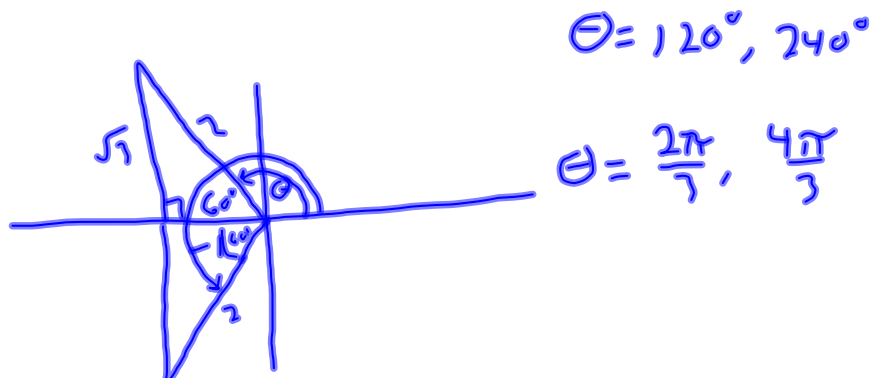


Ex 4 Give two values of θ that satisfy the equation. Give your answer in degrees ($0^\circ \leq \theta < 360^\circ$) and radians ($0 \leq \theta < 2\pi$)



$\cos \theta = x$

$\cos \theta = -\frac{1}{2}$



Homework

p.294

#1-23

odds