6.2

Draw the special angle triangles IN RADIANS.

How do you find all the special angles in the interval [0,2pi]?


Label the diagram:
Initial arm
Terminal arm
Angle in standard position

Determine an equation for $r$.

## What is the CAST rule?



Find the angle in radians of the angle whose terminal arm ends at $(4,3)$.


Find the angle in radians of the angle whose terminal arm ends at $(3,-7)$

Find the angle in radians of the angle whose terminal arm ends at (-4,-9)

Determine $\sin (3 \pi / 2)$ two ways.

Determine the exact value of $\cot (\pi / 2)$

Determine the exact value of $\sin 4 \pi / 3$.

$$
\begin{aligned}
& \text { Related Acute Angle } \\
& \qquad \begin{array}{l}
\text { In Q2 } \quad \theta \mathrm{r}=\pi-\theta \\
\text { In Q3 } \\
\text { In } \mathrm{r}=\theta-\pi \\
\text { In Q4 } \quad \theta \mathrm{r}=2 \pi-\theta
\end{array}
\end{aligned}
$$

Determine the exact value of $\cos (5 \pi / 4)$ and $\csc (11 \pi / 6)$

If $\cos \theta=-6 / 7$, where $\theta \in[0,2 \theta]$, evaluate $\theta$ to the nearest hundredth.

Solve for $\theta$ if $\tan \theta=-7 / 24$

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