Answer: $\cos \left(\frac{5 \pi}{6}\right)$

## Simplify:

$$
\frac{\cos ^{2} t-1}{\sin ^{2} t-1}
$$

Directions:
Do the problem on this sheet and then look for the solution on another sheet.


# Answer: <br> $$
t=0^{0}, 60^{0}, 300^{0}
$$ <br> Simplify: <br> $$
\sin t \cdot \tan t+\cos t
$$ 

## Answer:

$\sec t$

Solve:

$$
2 \sin ^{2} t+\sin t=0
$$

$$
\begin{aligned}
& \text { Answer: } \\
& t=0^{0}, 180^{0}, 210^{0}, 330^{0}
\end{aligned}
$$

## Simplify:

 $\sin 20 \cos 15+\cos 20 \sin 15$
## Answer:

$$
\sin 35^{\circ}
$$

Simplify:
$\sin t \sin t \quad \cos t \cos t$
$\overline{\cos t} \cdot \frac{\sin t}{\sin t} \cdot \frac{\cos t}{\cos t}$

Directions:
Do the problem on this sheet and then look for the solution on another sheet.

Answer:

$$
\sec t \cdot \csc t
$$

Problem:
Write the exact value of $\cos 15^{\circ}$ using the difference angle formula for cosine.

Do the problem on this sheet and then look for the solution on another sheet.

Answer:

$$
\frac{\sqrt{6}+\sqrt{2}}{4}
$$

Use the sum angle formula for sine to simplify:
$\sin (t+t)$

## Directions:

Do the problem on this sheet and then look for the solution on another sheet.

$$
\begin{aligned}
& \text { Answer: } \\
& \qquad \begin{array}{l}
2 \sin t \cos t \\
\text { Solve: } \\
\sin t=\frac{\sqrt{3}}{2}
\end{array}
\end{aligned}
$$

## Answer: $t=60^{\circ}$ and $120^{\circ}$

## Simplify:

$$
\cos \frac{\pi}{2} \cos \frac{\pi}{3}-\sin \frac{\pi}{2} \sin \frac{\pi}{3}
$$

Directions:
Do the problem on this sheet and then look for the solution on another sheet.

