## Lowercase Phi Examples with SimBraille

Note: Phi can be written 2 different ways in print, but only one way in braille.

1. Lowercase phi equals open fraction pi over two close fraction is written
$\phi=\frac{\pi}{2}$
: : : : : : : : : : : : :
2. Open fraction one over the secant of phi close fraction equals the cosine of phi is written
$\frac{1}{\sec \varphi}=\cos \varphi$
: : : : : : : : : : : : : : : : : : : : :
3. The cosine of open parenthesis pi minus phi close parenthesis equals negative cosine of phi is written
$\cos (\pi-\phi)=-\cos \phi$

4. The cosine of two phi equals two cosine squared phi minus one is written
$\cos 2 \varphi=2 \cos ^{2} \varphi-1$

5. Cosine squared phi equals one minus sine squared phi is written $\cos ^{2} \varphi=1-\sin ^{2} \varphi$ \#:o: : :
6. The secant of open parenthesis negative phi close parenthesis equals the secant of phi is written

$$
\begin{aligned}
& \sec (-\phi)=\sec \phi
\end{aligned}
$$

