

College Algebra with Trig
Wkst- Unit Circle Practice

Name: _____

Date: _____

A) State the sign of the following ratios.

- | | | | |
|---------------------|---------------------|-----------------------|------------------------|
| 1. $\sin 157^\circ$ | 2. $\cos 250^\circ$ | 3. $\tan (-64^\circ)$ | 4. $\sin (-500^\circ)$ |
| + | - | - | - |

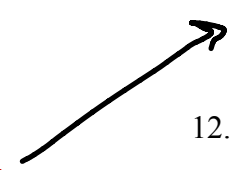
B) Write as a ratio of its reference angle

1. $\cos 140^\circ = \underline{-\cos 40^\circ}$ 2. $\tan 290^\circ = \underline{-\tan 70^\circ}$ 3. $\sin 250^\circ = \underline{-\sin 70^\circ}$

C) If $\cos 50^\circ \approx 0.64$ find the value of:

1. $\cos 130^\circ = \underline{-0.64}$ 2. $\cos 310^\circ = \underline{0.64}$ 3. $\cos 230^\circ = \underline{-0.64}$
- $-\cos 50$** **$\cos 50^\circ$** **$-\cos 50^\circ$**

D) Without using a calculator or notes, find the exact values of the following:

- | | | | |
|--|---|--|--|
| 1. $\sin 0^\circ$
0 | 2. $\tan 60^\circ$
$\sqrt{3}$ | 3. $\cos 45^\circ$
$\frac{\sqrt{2}}{2}$ | 4. $\tan 0^\circ$
0 |
| 5. $\sin 120^\circ$
$\frac{\sqrt{3}}{2}$ | 6. $\sin 300^\circ$
$-\frac{\sqrt{3}}{2}$ | 7. $\cos 210^\circ$
$-\frac{\sqrt{3}}{2}$ | 8. $\tan 150^\circ$
$-\frac{\sqrt{3}}{3}$ |
| 9. $\sin 225^\circ$
$-\frac{\sqrt{2}}{2}$ | 10. $\sin 270^\circ$
-1 | 11. $\tan 150^\circ$
Duplicate  | 12. $\cos 390^\circ$
$\frac{\sqrt{3}}{2}$ |
| 13. $\cos (-30^\circ)$
$\frac{\sqrt{3}}{2}$ | 14. $\sin 225^\circ$
$-\frac{\sqrt{2}}{2}$ | 15. $\cos (-135^\circ)$
$-\frac{\sqrt{2}}{2}$ | 16. $\tan 315^\circ$
-1 |

F) **TRICKY:** Find all values of θ , where θ is between 0° and 360° , where $\cos \theta = -0.5$

60° ref \neq

