

Exact Values Review: Unit Circle Method

Date _____ Period _____

Find the exact value of each trigonometric function. Using the **UNIT CIRCLE METHOD**.
Place the # on the unit circle and list your point on this page.

1) $\tan 945^\circ$

2) $\cot 0^\circ$

3) $\sec \frac{5\pi}{3}$

4) $\tan 90^\circ$

5) $\csc 450^\circ$

6) $\sin -\frac{5\pi}{6}$

7) $\csc 510^\circ$

8) $\sec -570^\circ$

9) $\cot 750^\circ$

10) $\csc \frac{19\pi}{4}$

11) $\sin -420^\circ$

12) $\sin -5\pi$

13) $\csc -\frac{23\pi}{6}$

14) $\tan 750^\circ$

15) $\sin \frac{23\pi}{6}$

16) $\csc -\frac{5\pi}{6}$

17) $\csc -\frac{5\pi}{2}$

18) $\tan \frac{3\pi}{2}$

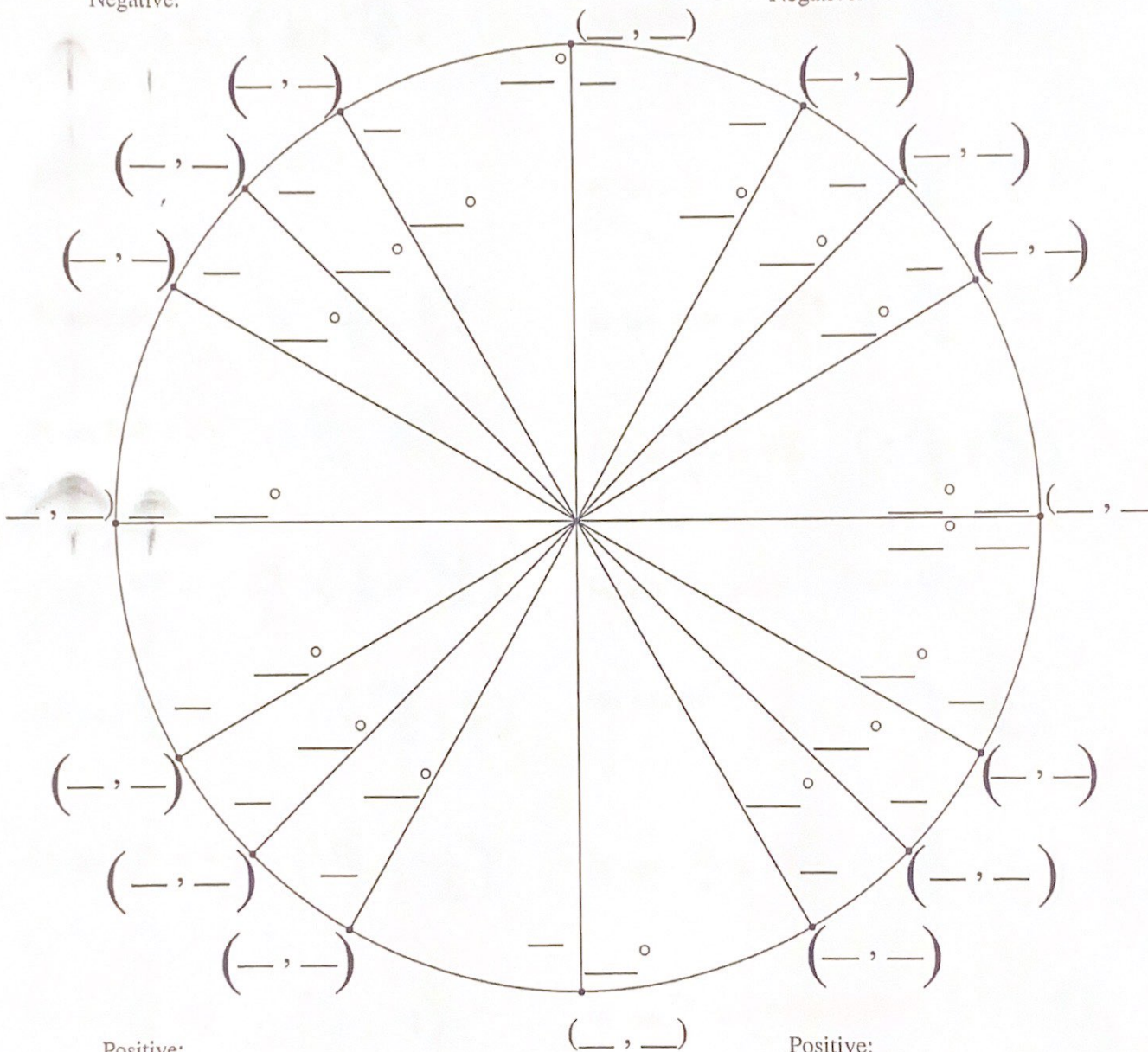
19) $\sec \pi$

20) $\cot \frac{13\pi}{4}$

Fill in The Unit Circle

Positive:
Negative:

Positive:
Negative:



Positive:
Negative:

Positive:
Negative:

Exact Values Review: Unit Circle Method

Find the exact value of each trigonometric function. Using the UNIT CIRCLE METHOD.
Place the # on the unit circle and list your point on this page.

1) $\tan 945^\circ = 1 \quad \left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

2) $\cot 0^\circ \Rightarrow \text{undefined} \quad (1, 0)$

3) $\sec \frac{5\pi}{3} = 2 \quad \left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

4) $\tan 90^\circ \Rightarrow \text{undefined} \quad (0, 1)$

5) $\csc 450^\circ = 1 \quad (0, 1)$

6) $\sin -\frac{5\pi}{6} = -\frac{1}{2} \quad \left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

7) $\csc 510^\circ = 2 \quad \left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

8) $\sec -570^\circ = -\frac{2\sqrt{3}}{3} \quad \left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

9) $\cot 750^\circ = \sqrt{3} \quad \left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

10) $\csc \frac{19\pi}{4} = \sqrt{2} \quad \left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

11) $\sin -420^\circ = -\frac{\sqrt{3}}{2} \quad \left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

12) $\sin -5\pi = 0 \quad (-1, 0)$

13) $\csc -\frac{23\pi}{6} = 2 \quad \left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

14) $\tan 750^\circ = \frac{\sqrt{3}}{3} \quad \left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

15) $\sin \frac{23\pi}{6} = -\frac{1}{2} \quad \left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

16) $\csc -\frac{5\pi}{6} = -2 \quad \left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

17) $\csc -\frac{5\pi}{2} = -1 \quad (0, -1)$

18) $\tan \frac{3\pi}{2} \Rightarrow \text{undefined} \quad (0, -1)$

19) $\sec \pi = -1 \quad (-1, 0)$

20) $\cot \frac{13\pi}{4} = 1 \quad \left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

Fill in The Unit Circle

Positive: \sin, \csc
 Negative: \cos, \tan, \sec, \cot

Positive: $\sin, \cos, \tan, \sec, \csc, \cot$
 Negative: **NONE**

