

## Exact Values (Degrees)

Date: \_\_\_\_\_ Hour: \_\_\_\_\_

**Draw the reference triangle, list the quadrant, and label all sides of the triangle. Then, give all exact values of the given angle.**

1)  $150^\circ$

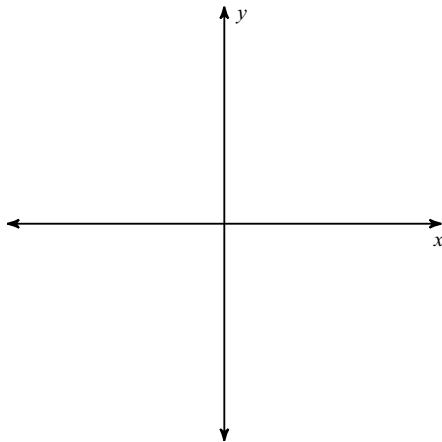
Quadrant:

RA:

$\sin 150^\circ =$

$\cos 150^\circ =$

$\tan 150^\circ =$



2)  $135^\circ$

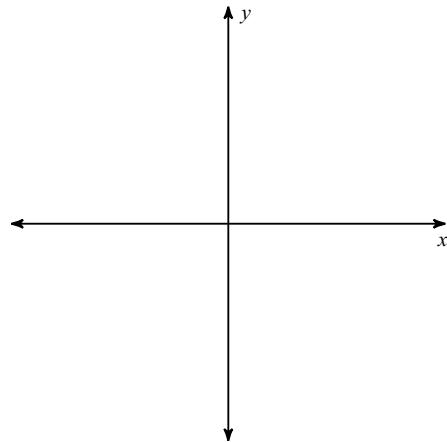
Quadrant:

RA:

$\sin 135^\circ =$

$\cos 135^\circ =$

$\tan 135^\circ =$



3)  $300^\circ$

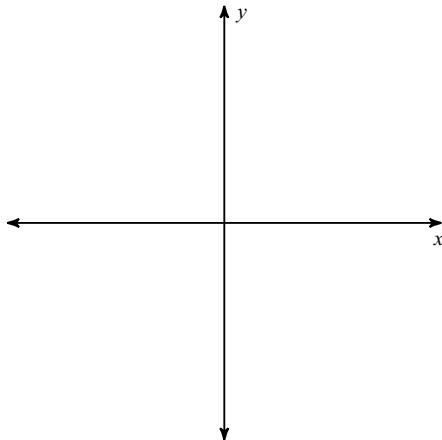
Quadrant:

RA:

$\sin 300^\circ =$

$\cos 300^\circ =$

$\tan 300^\circ =$



4)  $225^\circ$

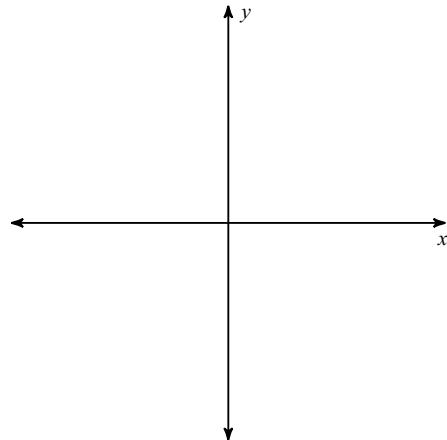
Quadrant:

RA:

$\sin 225^\circ =$

$\cos 225^\circ =$

$\tan 225^\circ =$



## Answers to Exact Values (Degrees)

1) Quadrant: II

RA:  $30^\circ$

$$\sin 150^\circ = \frac{1}{2}$$

$$\cos 150^\circ = -\frac{\sqrt{3}}{2}$$

$$\tan 150^\circ = -\frac{\sqrt{3}}{3}$$

2) Quadrant: II

RA:  $45^\circ$

$$\sin 135^\circ = \frac{\sqrt{2}}{2}$$

$$\cos 135^\circ = -\frac{\sqrt{2}}{2}$$

$$\tan 135^\circ = -1$$

3) Quadrant: IV

RA:  $60^\circ$

$$\sin 300^\circ = -\frac{\sqrt{3}}{2}$$

$$\cos 300^\circ = \frac{1}{2}$$

$$\tan 300^\circ = -\sqrt{3}$$

4) Quadrant: III

RA:  $45^\circ$

$$\sin 225^\circ = -\frac{\sqrt{2}}{2}$$

$$\cos 225^\circ = -\frac{\sqrt{2}}{2}$$

$$\tan 225^\circ = 1$$