

Name: \_\_\_\_\_

## Trigonometric Functions of Any Angle

**Exercise 1:** Given  $\sin 45^\circ = \frac{\sqrt{2}}{2}$ , find:

1)  $\sin(-45^\circ)$

2)  $\cos(180^\circ - 45^\circ)$

3)  $\sec(-45^\circ)$

4)  $\tan(-45^\circ)$

5)  $\cot(180^\circ - 45^\circ)$

6)  $\cot(-45^\circ)$

7)  $\sin(180^\circ + 45^\circ)$

8)  $\sin(180^\circ - 45^\circ)$

9)  $\tan(180^\circ + 45^\circ)$

10)  $\sec(180^\circ + 45^\circ)$

11)  $\sin(360^\circ - 45^\circ)$

12)  $\sin(360^\circ + 45^\circ)$

**Exercise 2:** Find the reference angle.

1)  $A = 1620^\circ$

2)  $A = 2620^\circ$

3)  $A = 1662^\circ$

4)  $A = 3020^\circ$

5)  $A = 7632^\circ$

6)  $A = 4376^\circ$

7)  $A = 4537^\circ$

8)  $A = 1020^\circ$