Name_____

Exact Trig Values of Special Angles

Date_____ Period____

Find the exact value of each trigonometric function.

1) $\tan \theta$

60°

2) $\sin \theta$

225°

3) $\sin \theta$

90°

4) $\cos \theta$

150°

5) $\cos \theta$

90°

6) $\tan \theta$

240°

7) $\cos \theta$

135°

8) $\tan \theta$

150°
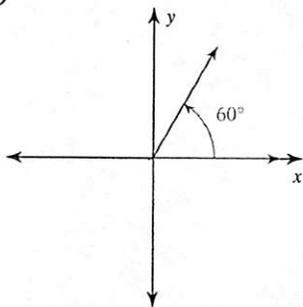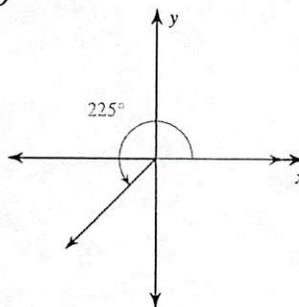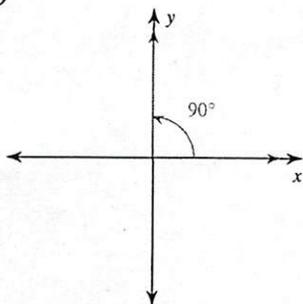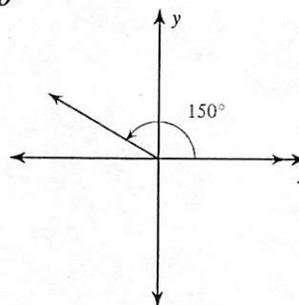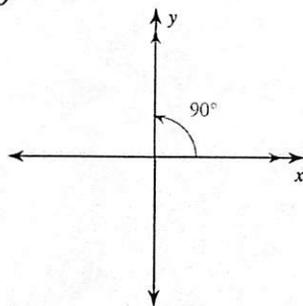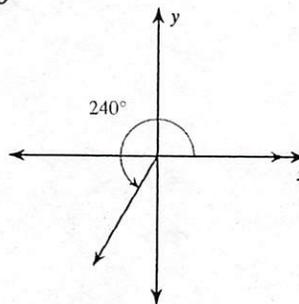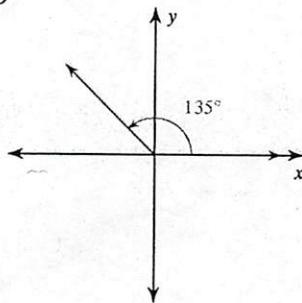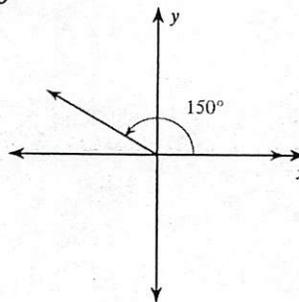
9) $\cos \theta$
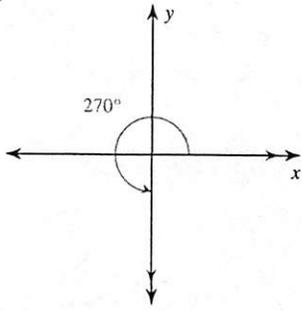
10) $\tan \theta$
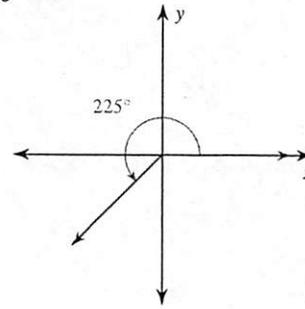
11) $\cos 270°$

12) $\sin 0$

13) $\cot \dfrac{7\pi}{4}$

14) $\csc \dfrac{2\pi}{3}$

15) $\csc 225°$

16) $\sin 300°$

17) $\csc 90°$

18) $\tan 240°$

19) $\sin \dfrac{\pi}{4}$

20) $\tan 120°$

21) $\tan -\dfrac{13\pi}{6}$

22) $\cos -630°$

23) $\cos 990°$

24) $\csc -\dfrac{31\pi}{6}$

25) $\csc -\dfrac{5\pi}{6}$

26) $\cos -\dfrac{17\pi}{3}$

27) $\sin \dfrac{29\pi}{6}$

28) $\sec 945°$

29) $\cos -\dfrac{11\pi}{2}$

30) $\sin -2\pi$

Name _____   Date_____

WORKSHEET - THE BASIC 8 TRIG IDENTITIES

Simplify each expression to a single trig function or number.

1. $\sec \theta \sin \theta$

2. $\cos \theta \tan \theta$

3. $\tan^2 \theta - \sec^2 \theta$

4. $1 - \cos^2\theta$

5. $(1 - \cos \theta)(1 + \cos \theta)$

6. $(\sec x - 1)(\sec x + 1)$

7. $\dfrac{1}{\sin^2 A} - \dfrac{1}{\tan^2 A}$

8. $1 - \dfrac{\sin^2 \theta}{\tan^2 \theta}$

9. $\dfrac{1}{\cos^2\theta} - \dfrac{1}{\cot^2\theta}$

10. $\cos\theta(\sec\theta - \cos\theta)$

11. $\cos^2 A(\sec^2 A - 1)$

12. $(1 - \cos x)(1 + \sec x)(\cos x)$

13. $\dfrac{\sin x \cos x}{1 - \cos^2 x}$

14. $\dfrac{\tan^2\theta}{\sec\theta + 1} + 1$