7.4 B worksheet Name _____ Assignment # _____

Find the measure of each reference angle.

1. 153^0 2. 452^0 3. -58^0 4. -105^0

Evaluate the exact value of each expression in simplest rationalized radical form.

5. $\sin\left(-\frac{\pi}{3}\right)$ 6. $\cos(-10\pi)$ 7. $\sin(-495^0)$ 8. $\cos(765^0)$

9. $\cos\left(-\frac{19\pi}{6}\right)$ 10. $\sin 1305^0$ 11. $\cos(-240^0)$ 12. $\sin\left(\frac{4\pi}{3}\right)$

13. $\cos(-270^0)$ 14. $\cos(-180^0)$ 15. $\sin 360^0$ 16. $\sin -270^0$

17. $\sin\left(\frac{\pi}{2}\right)$ 18. $\sin\left(\frac{3\pi}{2}\right)$ 19. $\cos\left(\frac{7\pi}{6}\right)$ 20. $\sin\left(-\frac{7\pi}{6}\right)$

Sketch the angle. Then find its reference angle.

21. -510^0 22. 345^0 23. 200^0 24. -240^0

Use the given point on the terminal side of an angle θ in standard position. Evaluate the sine and cosine of θ.

25. (3, –2) 26. (–3, 4) 27. (–1, –3) 28. $\left(-\sqrt{3},1\right)$

Find one positive and one negative angle coterminal with the given angle.

29. 105^0 30. -75^0 31. $\frac{4\pi}{3}$ 32. $\frac{-\pi}{4}$

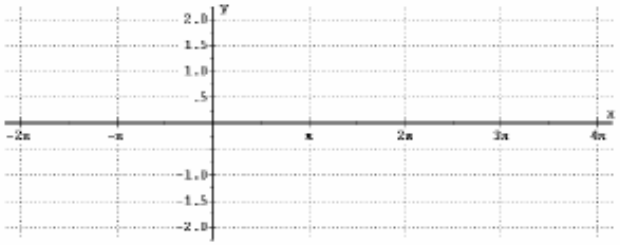
Rewrite each degree measure in radians and each radian measure in degrees.

33. 315^0 34. -75^0 35. $\frac{-3\pi}{4}$ 36. $\frac{5\pi}{6}$

37. Find the arc length and area of a sector with the given radius 8m and central angle $\theta = 210^0$

38. Find the arc length and area of a sector with the given radius 5cm and central angle $\theta = 2$ radians

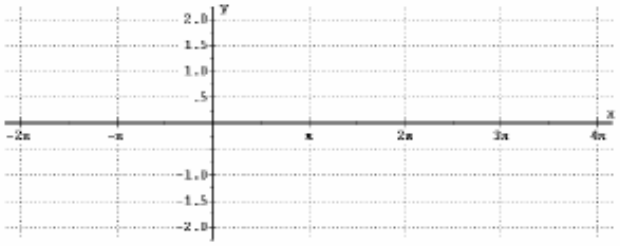
39. Graph $y = \sin x$ over $-2\pi \le x \le 2\pi$. Does it have an inverse? Why or why not?
Darken the portion of $y = \sin x$ that is ***y* = Sin x that has an inverse.**



$y = \sin x$: Domain _____ Range: _____

$y = Sin\, x$: Domain _____ Range: _____

b) Graph $y = \cos x$ over $-2\pi \le x \le 2\pi$ and then darken the portion of $y = \cos x$ that is ***y* = Cos x**



$y = \cos x$: Domain _____ Range: _____

$y = Cosx$: Domain _____ Range: _____

Why doesn't y = cos x have an inverse?
Why do we need to restrict the domain for y = Cos x?