F.S.T. **Name** _____
Chapter 4a Review (4-1 through 4-5) **Block** ____ **Date** _____

Non- Calculator

1. Complete the table.

Equivalent Measures of Rotations			
Degrees	Radians (exact)	Radians (nearest tenth)	Revolutions
$-135°$	a)	b)	c)
d)	$-\frac{8\pi}{5}$	e)	f)
g)	h)	j)	$\frac{2}{3}$
k)	$\frac{37\pi}{9}$	m)	n)

Give the exact value for each expression.

2. $\sin 270°$ 3. $\cos 2\pi$ 4. $\tan 90°$ 5. $\cos \frac{-3\pi}{2}$ 6. $\tan \frac{5\pi}{2}$

If $\cos\theta = 0.68$, find all possible values of each.

7. $\sin\left(\frac{\pi}{2} - \theta\right)$ 8. $\cos(-\theta)$ 9. $\cos(\pi + \theta)$ 10. $\cos(\pi - \theta)$

If $\sin\theta = \frac{-4}{5}$, find each expression.

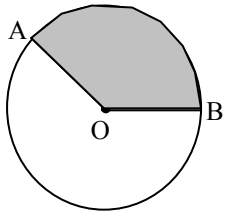
11. $\cos\theta$ 12. $\tan\theta$

Give exact values for each expression.

13. $\tan 330°$ 14. $\cos \frac{7\pi}{3}$ 15. $\sin\frac{-7\pi}{6}$ 16. $\cos(-135°)$ 17. $\tan \frac{7\pi}{4}$

Calculator Allowed

18. The radius of the circle is 8 inches. The area of the shaded sector is 10π square inches. Find the measure of $\angle AOB$ in radians. Find the length of arc AB.



19. In a circle of diameter 22 feet, a sector is formed by a central angle of 136º. Find the area of the sector to the nearest hundredth of a square foot.

20. In a circle of radius 14 cm, how long is an arc with a central angle of $\frac{5\pi}{8}$?

21. In what interval(s) between 0 and 2π are $\tan\theta$ and $\sin\theta$ both positive? both negative?

22. Suppose $\cos\theta = -.075$. Find $\sin\theta$ and $\tan\theta$ to the nearest thousandth.

23. Approximate $\cos\frac{3\pi}{7}$ to four decimal places.

Review from Previous Chapters

Anything from chapters 1 and 7 is fair game!