TRIGONOMETRY REVIEW #2 Name_____

Special angles, arc length and sectors

Date_____ Period____

Find the 6 trig ratios for the point.

1) $(-5, 2)$

2) $(4, -\sqrt{3})$

Find the remaining 5 trig ratios given one trig ratio and a Quadrant.

3) $\tan\theta = -\frac{3}{2}$, Quadrant II

Find the 6 trig ratios for each of the following angles. Give exact values, no decimals.

4) $-315°$

5) $\frac{10\pi}{3}$

Find the exact value for each of the following. No decimals.

6) $\sin(-\frac{7\pi}{3})$

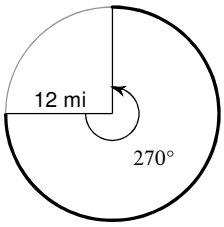
7) $\sec(-\frac{8\pi}{3})$

8) $\csc(-\frac{5\pi}{6})$

9) $\cot(-\frac{9\pi}{2})$

Find the length of each arc.

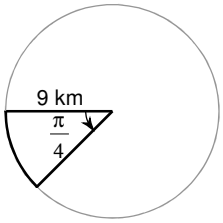
10)



11) $r = 13$ cm, $\theta = 210°$

Find the area of each sector.

12)



13) $r = 16$ km, $\theta = 150°$

Find the radius of the circle.

14) $s = \frac{85\pi}{6}$ and $\theta = 150°$

15) $A = \frac{225\pi}{8}$ and $\theta = 45°$

Find the degree measure, θ, of the central angle.

16) $s = \frac{80\pi}{3}$; $r = 20$

17) $A = \frac{45\pi}{2}$; $r = 6$

Find the distance between the two cities given the radius of the earth is approximately 6400 km. Round your answer to the nearest tenth of a km.

18) City A is 15° N and City B is 35° N

19) City A is 13° E and City B is 45° W