GSE Geometry **Unit 4B Review Sheet** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Topic**: Arc Length | **Things to Remember**:* Circumference = $2πr$
* r = radius
* $\frac{arc length}{circumference (2πr)}=\frac{angle}{360°}=$
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| **Examples**: |
| 1. Find the circumference, **in terms of pi**, given the diameter is 14 feet. | 2. Find the radius given the circumference is $25π $in. |
| 3. Find the arc length of the shaded section.  | 4. Find the arc length of the **shaded section** |
| 5. A golf club is swung around to hit a golf ball that created a distance of 15 feet around. If the golf club is 3.67 feet, what was the angle? | 6. If it’s 4 o’clock on the classroom clock and the distance the hour hand has traveled is 12.57 in, what is the length of the hour hand (radius)? |
| **Topic**: Sector Area | **Things to Remember**:* Area = $πr^{2}$
* $\frac{sector area}{Area (πr^{2})}=\frac{angle}{360°}$
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| **Examples**: |
| 7. Find the area, **in terms of pi**, given the radius is 14 feet. | 8. Find the diameter given the area is $25π $in. |
| 9. Find the area of the shaded section.   | 10. Find the area of the **shaded section** |
| 11. The area of one piece of pizza is . The pizza is cut into eighths (***HINT: Find the angle measure using a similar the method we did for the clock***). Find the radius of the pizza pie. | 12. A sprinkler system can shoot water out a distance of 6 yards. If the sprinkler system can cover an area of 75.4 yds2, then what angle is the sprinkler system using? |
| **Mixed Review** |
| 13. Find the **circumference**, **in terms of pi**, of a circle with a radius of 12 cm.  | 14. Calculate the radius of a circle that has an **area** of 4$π$ in.2 **Round to the nearest hundredths.** |
| 15. What is the **area** of a 30o sector of a circle with a radius of 5.5 inches? | 16. Find the **arc length** of the shaded sector. **Round to the nearest hundredths.**Go07an_1103praB_02 |
| 17. Find the central angle of a sector that has a **length** of 15$π$ mm and a radius of 18 mm. **Round to the nearest hundredths.** | 18. Find the central angle of a sector that has an **area** of 23 km2 and a **diameter** of 10 km. **Round to the nearest hundredths.** |
| 19. If the **length** of a sector is 24 cm and its central angle measure is 150o, what is radius of the circle? **Round to the nearest hundredths.** | 20. A windshield wiper blade is 18 inches long. To the nearest square inch, what is the **area** covered by the blade as it rotates through an angle of 122°? **Round to the nearest hundredths.** |