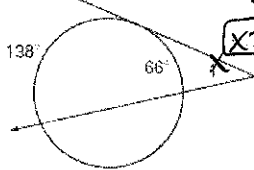
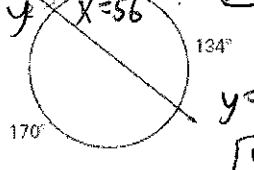
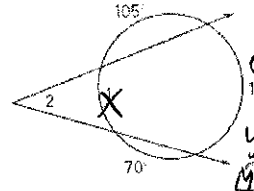
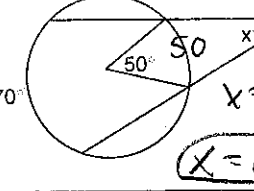
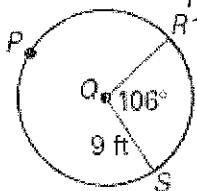
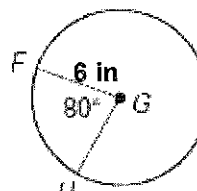
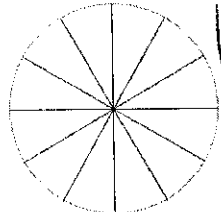



Name: Key

Date: \_\_\_\_\_

Use the following to review for you test. **Work the Practice Problems on a separate sheet of paper.**

What you need to know & be able to do	Things to remember		
Find the measure of arcs from central angles.	Angle = Arc		1. Find $m\widehat{MN}$ 70 2. Find $m\widehat{QNR}$ 290 3. Find $m\widehat{MR}$ 110 4. Find $m\widehat{PRN}$ 280
Find the measure of arcs and angles with inscribed angles	Angle = $\frac{\text{Arc}}{2}$	5. Find $m\angle GHJ$ $x = \frac{100}{2}$ $x = 50$	6. Find $m\widehat{CD}$ $40 = \frac{x}{2}$ $80 = x$
Find the measure of arcs and angles if the angle is inside the circle	Angle = $\frac{\text{Arc} + \text{Arc}}{2}$	7. Find $m\widehat{BC}$ $40 = \frac{x}{2}$ $x = 80$	8. Find $m\angle C$ $180 - 90 - 50$ $x = 40$
		9. Find $m\angle 1$ and $m\angle 2$ $x = \frac{33 + 131}{2}$ $x = 82$ $x + y = 180$ $y = 98$	10. Find the value of x. $180 - 52 = 128$ $128 = \frac{x + 144}{2}$ $x = 112$
		11. Find 1 & 2 $70 = \frac{x + 66}{2}$ $x = 74$ $360 - 74 - 66 = 220$ $220 - 126 = 94$ $y = 94$	12. Find 1 & 2 $47 = \frac{x + 41}{2}$ $x = 53$ $180 - 47 = 133$ $y = 133$

<p>Find the measure of arcs and angles if the angle is outside the circle.</p>	$\text{Angle} = \frac{\text{Large Arc} - \text{Small Arc}}{2}$	<p>13. Find 1.</p>  <p><math>x = \frac{138 - 66}{2}</math> <math>x = 36</math></p>	<p>14. Find 1 &amp; 2</p>  <p><math>x = 56</math> <math>y = \frac{134 - 56}{2}</math> <math>y = 39</math></p>
<p>Find the area of circles</p>	$\text{Area} = \pi r^2$	<p>15. Find 1 &amp; 2.</p>  <p><math>x = 55</math> <math>y = \frac{130 - 55}{2}</math> <math>y = 37.5</math></p>	<p>16. Find the value of x.</p>  <p><math>x = \frac{170 - 50}{2}</math> <math>x = 60</math></p>
<p>Find the area of sectors</p>	$\text{Sector} = \frac{\text{Arc}}{360} \cdot \pi r^2$	<p>17. The area of a circle is <math>31.4 \text{ cm}^2</math>. What is the radius?</p> <p><math>31.4 = \pi r^2</math> <math>r^2 = 9.99</math> <math>r = 3.16</math></p>	<p>18. Find the area of a circle with a diameter of 22 inches.</p> <p><math>r = 11</math> <math>A = \pi(11)^2 = 380.13</math></p>
<p>Find the circumference of circles</p>	$\text{Circumference} = 2\pi r$	<p>19. Find the area of the shaded region</p>  <p><math>\frac{106}{360} \pi(9)^2 = 477\pi</math> <math>= 74.93 \text{ ft}^2</math></p>	<p>20. Find the area of the shaded region.</p>  <p><math>\frac{80}{360} \pi(6)^2 = 8\pi</math> or <math>25.13 \text{ in}^2</math></p>
<p>Find arc lengths</p>	$\text{Circumference} = \frac{\text{Arc}}{360} \cdot 2\pi r$	<p>21. Find the circumference of a circle with a radius of 8 m.</p> <p><math>(= 2\pi(8) = 16\pi = 50.27 \text{ m})</math></p>	<p>22. The circumference of a circle is 25.12 ft. What is the radius?</p> <p><math>25.12 = 2\pi r</math> <math>r = 4</math></p>
<p>Word Problems</p>	<p>25. A birthday cake has a radius of 4 in. What is the length of icing needed to go around the end of the whole cake? How much icing would be used for one slice?</p>  <p><math>C = 2\pi(4) = 8\pi</math> or <math>25.13 \text{ in}</math> <math>\frac{1}{12} 2\pi(4) = \frac{2\pi}{3}</math> or <math>2.09 \text{ in}</math></p>	<p>26. A wall clock has an area of <math>452.39 \text{ in}^2</math>. Find the diameter of the clock. Then, find the area of the sector formed when the time is 3:00.</p>  <p><math>\pi r^2 = 452.39</math> <math>r = 12 \rightarrow d = 24</math> <math>\frac{90}{360} \pi(12)^2 = 36\pi</math> <math>= 113.10 \text{ in}^2</math></p>	