

Name _____ Period _____

Circumference to Area

<p>Step 1</p> <p>Start with $c = \pi d$</p>	<p>$c = 37.68$</p>
<p>Step 2</p> <p>Substitute value for c and π</p> $\frac{c}{\pi} = \frac{\pi d}{\pi}$	
<p>Step 3</p> <p>Divide both sides of the equation by π to isolate d.</p> $\frac{c}{\pi} = \frac{\pi}{\pi} d \text{ therefore } \frac{c}{\pi} = d$	
<p>Step 4</p> <p>Divide d by 2 $\frac{d}{2} = r$</p> <p>to get r</p>	
<p>Step 5</p> <p>With r we can solve for area because:</p> $a = \pi r^2$	

Area to Circumference

<p>Step 1</p> <p>Start with $a = \pi r^2$</p>	<p>$a = 254.34 \text{ units}^2$</p>	
<p>Step 2</p> <p>Substitute value for a and π</p> <p>a and π</p> <p>_____ = _____ r^2</p>		
<p>Step 3</p> <p>Divide both sides of the equation by π to isolate r^2.</p> <p>$\frac{a}{\pi} = \frac{\pi}{\pi} r^2$ therefore $\frac{a}{\pi} = r^2$</p>		
<p>Step 4</p> <p>Take the square root of r^2.</p> <p>$\sqrt{r^2} = r$</p>		
<p>Step 5</p> <p>With r we can solve for d.</p> <p>$2 \times r = d$</p> <p>$a = \pi r^2$</p>		
<p>Step 6</p> <p>With d we can solve for the circumference. $c = \pi d$</p>		