


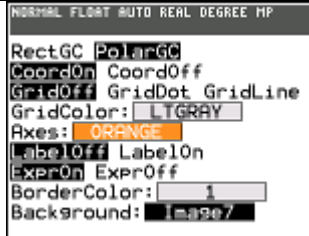

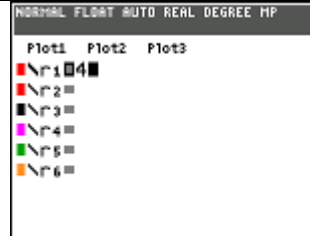
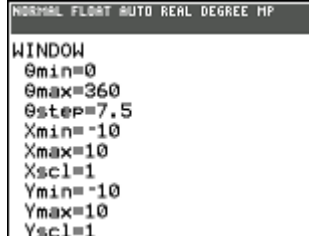

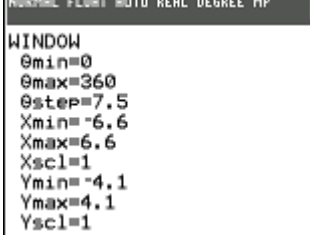
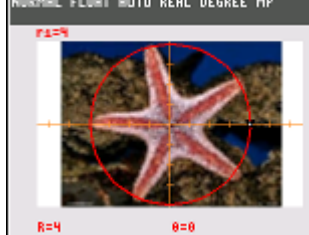
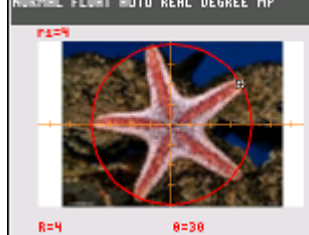
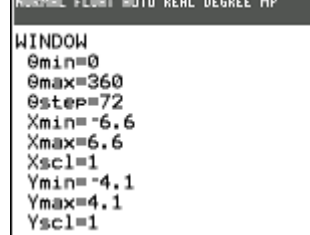
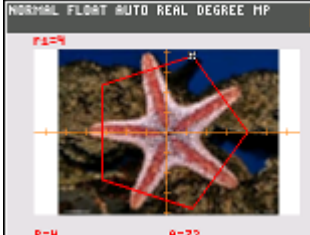
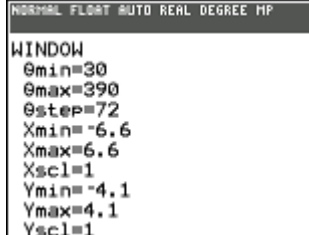
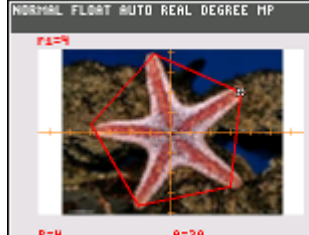
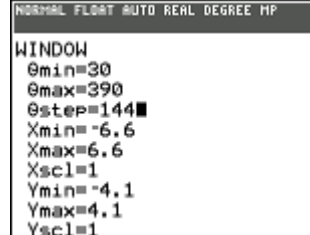
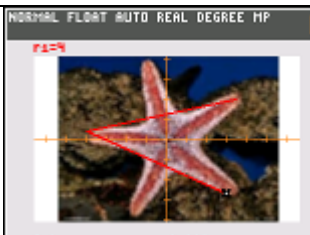
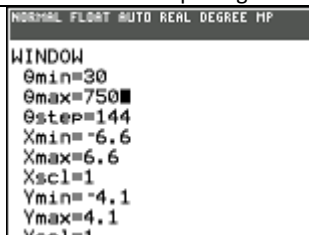
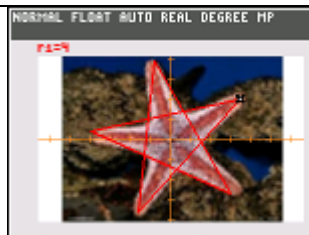
STAR POLYGONS = SEA STARS

Using Image Files on a TI-84CE

Stuart Moskowitz, Humboldt State University, retired, stuart@humboldt.edu

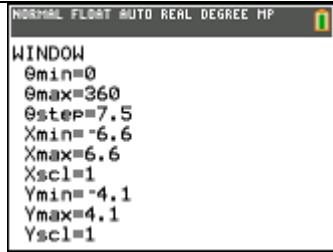
John LaMaster, Purdue University at Fort Wayne, lamaster@pfw.edu

TTT Conference, Baltimore March 9, 2019

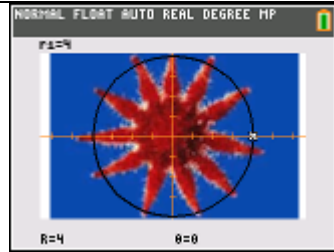
			
<p>1. MODE: Polar and Degree</p>	<p>2. FORMAT: Polar coordinates & orange axes</p>	<p>3. FORMAT: Image 7</p>	<p>4. $r_1=4$</p>
			
<p>5. GraphStyle: RED & THICK</p>	<p>6. ZOOM Standard</p>	<p>7. WINDOW</p>	<p>8. ZOOM Decimal</p>
			
<p>9. WINDOW</p>	<p>10. Graph & Trace</p>	<p>11. Trace to 30 degrees (first "arm")</p>	<p>12. WINDOW: θstep=72 for a pentagon</p>
			
<p>13. Graph</p>	<p>14. θmin=30 & θmax=390 rotates the pentagon</p>	<p>15. Graph</p>	<p>16. θstep=144 For a (5,2) star polygon</p>
			
<p>17. Graph</p>	<p>18. θmax=750 to complete star polygon</p>	<p>19. Graph</p>	



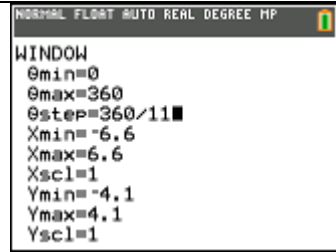
21. FORMAT: Image8



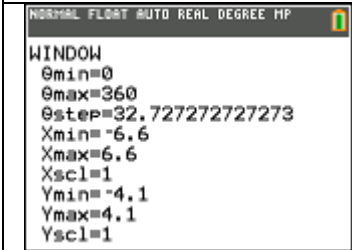
22. Zstandard & Zdecimal
 $\Theta_{\min}=0$, $\Theta_{\max}=360$, $\Theta_{\text{step}}=7.5$



23. Graph



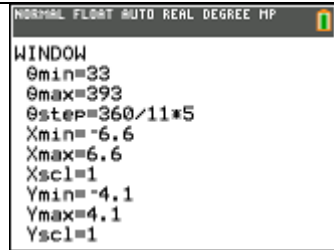
24. $\Theta_{\text{step}}=360/11$ for an 11-gon



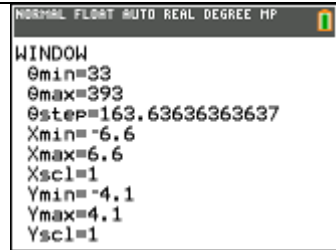
25. Press enter for $360/11=32.73$



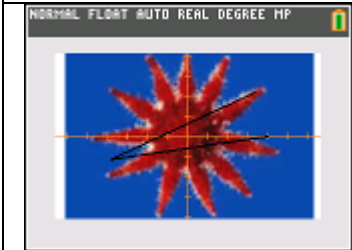
26. Graph & Trace to first "arm"



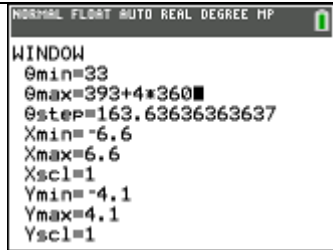
27.
 $\Theta_{\min}=33$, $\Theta_{\max}=393$,
 $\Theta_{\text{step}}=360/11*5$
 for an (11,5) star polygon starting
 at first "arm"



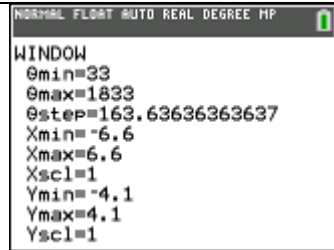
28. $\Theta_{\text{step}}=360/11*5=163.636$
 (note calc roundoff error!!)



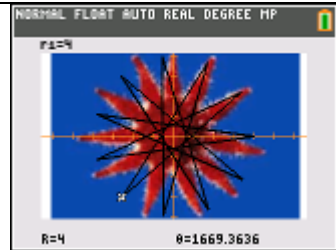
29. Graph



30. $\Theta_{\max}=393+4*360$
 Add four more times around
 the circle to complete star polygon



31. $\Theta_{\max}=393+4*360=1833$



32. Graph