Video 5.1A transcript – How to plot polar coordinates.

This video presentation is to demonstrate how to plot polar coordinates. To plot this particular polar coordinate – negative two comma pi over four you first notice that negative two is representing the radius. And the angle, pi over four, is the theta. So, we will first rotate the terminal side from the polar axis to pi over four, and pi over four is about forty-five degrees, and forty-five degrees is halfway between zero and pi half. Pi half is ninety degrees. So, if we rotate the terminal side from zero degrees to pi over four, that will be about right here – about halfway. Since a radius is negative, my p will lie on a ray that is opposite to the terminal side, so we will extend my terminal side on the other side of the pole… make a ray. And this is, and this point right here, will be my negative two comma pi over four, and that's how we plot the polar coordinates. If r is positive, our coordinates will be right over here. Since r is negative, my point p lies on the ray opposite to the terminal side. That will conclude this video presentation.