Quiz 5 6/21/2024

Name: \_\_\_\_\_

1. Place the complex number z = -1 + i on the *xy*-coordinate system. Then write it in polar form  $z = r(\cos \theta + i \sin \theta)$ .

2. Write the complex number  $(-1+i)^4$  in both polar form and standard form a+ib.

3. For each value of t = -2, -1, 0, 1, 2, place the point  $(x(t), y(t)) = (2t, t^2 - 1)$  on the xy-coordinate system. Then sketch the parametric curve  $(x(t), y(t)) = (2t, t^2 - 1)$ .