10.2 Plane Curves and Parametric Equations

Name: Date: August 3, 2015

P 2. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = 5 - 4t, \ y = 2 + 5t$$

P 4. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = 2t^2, \ y = t^4 + 1$$

P 6. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = t^2 + t, \ y = t^2 - t$$

P 8. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = \sqrt[4]{t}, \ y = 8 - t$$

P 10. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = 1 + \frac{1}{t}, \ y = t - 1$$

P 12. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = |t - 1|, \ y = t + 2$$

P 14. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = e^{-t}, \ y = e^{2t} - 1$$

P 18. Sketch the curve represented by the parametric equations (indicate the orientation of the curve), and write the corresponding rectangular equation by eliminating the parameter.

$$x = 3\cos\theta, \ y = 7\sin\theta$$