Name _____ Score _____ Teacher _____ Date _____

Parametric Equations

Show parameter values, preserve the inherited domain, and state the direction of motion when requested.

1. **Eliminate t from x = 2 cos(t), y = -2 sin(t), 0 <= t <= pi. State the inherited portion and orientation.**

2. **Make a value table and trace x = t - 1, y = 1t^2 - 1 on -2 <= t <= 2, with orientation.**

t	-2	-1	0	1	2
(x,y)					

Use exact values unless a decimal angle is requested.

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Parametric Equations

Show parameter values, preserve the inherited domain, and state the direction of motion when requested.

3. **A projectile follows x = 5t and y = 5 + 14t - 4t^2 for t >= 0. Find its initial height, horizontal velocity, maximum height, and when and where it lands.**

4. **Give a parameterization of y = 3x - 2 on -1 <= x <= 3.**

Use exact values unless a decimal angle is requested.

Name _____ Score _____ Teacher _____ Date _____

Parametric Equations

Show parameter values, preserve the inherited domain, and state the direction of motion when requested.

5. **Eliminate t from x = 6 cos(t), y = -6 sin(t), 0 <= t <= pi. State the inherited portion and orientation.**

6. **Make a value table and trace x = t - 1, y = 2t^2 - 1 on -2 <= t <= 2, with orientation.**

t	-2	-1	0	1	2
(x,y)					