

1. The slope of the tangent to the parametric curve $x(t) = 3t^2 - 3$, $y(t) = 2t + 1$ at $t = 1$ is

- A $1/3$
- B 1
- C 2
- D 3
- E 6

2. The curve defined by parametric equations $x(t) = \cos(t)$, $y(t) = (\sin(t))^2$ is

- A a circle
- B a semi-circle
- C parabola
- D portion of parabola
- E hyperbola
- F single branch of hyperbola

3. Equation for the parametric curve $x(t) = \cos(t)$, $y(t) = 4 \sin(t)$ is

- A $16x^2 - y^2 = 16$
- B $16x^2 + y^2 = 16$
- C $4x^2 + y^2 = 4$
- D $x^2 + 16y^2 = 16$
- E $16x^2 + 16y^2 = 1$