

28th May

Corbettmaths

A circle has equation

$$(x - 6)^2 + (y + 3)^2 = 9$$

State, with a reason, whether this circle intersects the y-axis

Solve

$$x\sqrt{147} = 8\sqrt{3} + \sqrt{675}$$

Simplify

$$\frac{x+3}{x^9} \times \frac{x^7}{x+6} \div \frac{x^2}{4x^2+21x-24}$$

Factorise $7x^2 - 22xy + 16y^2$

The gradient of the curve C is given by

$$\frac{dy}{dx} = (2x - 3)^2$$

Mark says that the tangent at the point A on the curve C is parallel to the line $y = 7 - 2x$

Explain why Mark is incorrect.