## Polar coordinates – AS Further Mathematics P1

## 1. June/2022/Paper\_7366/01/No.8

The curve C has the polar equation

$$r = 4 - 2\cos\theta \qquad \qquad -\pi < \theta \le \pi$$

(a) Verify that the point with polar coordinates  $\left(3, \frac{\pi}{3}\right)$  lies on C

[1 mark]

(b) Find the exact polar coordinates of the point on C which is furthest from the pole, O [3 marks]

aqasolvedexampapers.co.uk Find the exact Cartesian coordinates of the point on *C* where  $\theta$  is  $\frac{\pi}{6}$ (c) [3 marks]