Practice worksheet | Further trigonometry

Solving trig equations and describing all solutions

Name: _____ Date: _____

6 questions | 12 marks

1. Solve $\cos x = -\frac{1}{2}$ on $[0, 2\pi)$. [2 marks]

2. Solve $\sin x = 0$ on $[-\pi, \pi]$. [2 marks]

3. Give all real solutions of $\cos x = 1$. [2 marks]

4. Solve $2\cos^2 x - \cos x - 1 = 0$ on $[0, 2\pi)$. [2 marks]

5. Solve $\sin(2x) = 0$ on $[0, \pi]$. [2 marks]

6. Solve $\sin x(2\cos x - 1) = 0$ on $[0, 2\pi)$. [2 marks]